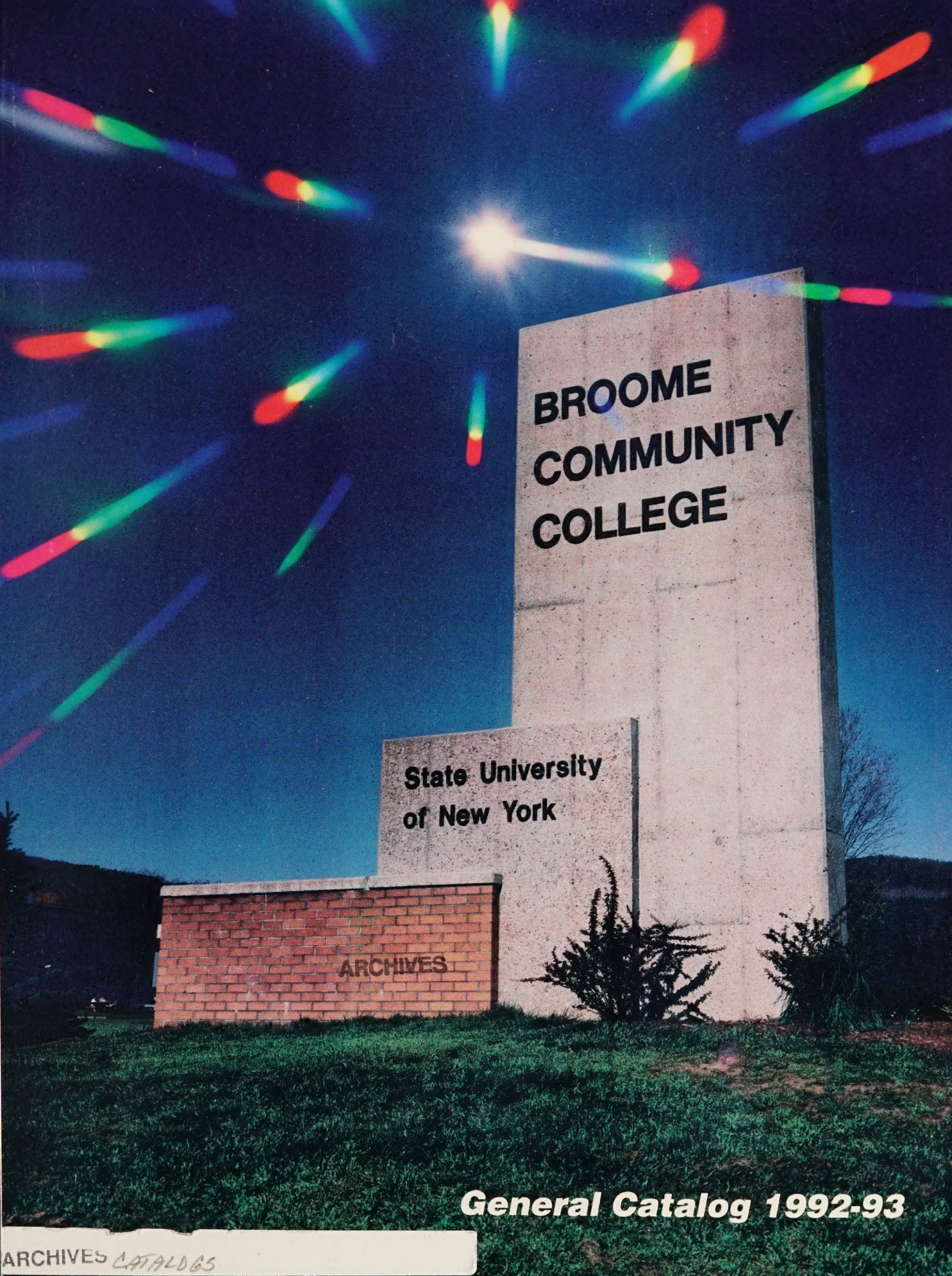


General Catalog 1992-93

ARCHIVES CATALOGS

ACCREDITATION

Broome Community College is a member of the Middle States Association of Colleges and Schools.

The College is supervised by the State University of New York and its curriculums are registered by the State Education Department.

The Chemical, Civil, Electrical and Mechanical Engineering Technology programs are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc. (TAC/ABET).

The Dental Hygiene Program is accredited by the Commission on Dental Accreditation and by the United States Department of Education, and the Nursing Curriculum is accredited by the National League for Nursing.

The Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association (AMA) has accredited four other curriculums-Radiologic Technology, Medical Record Technology, Medical Laboratory Technology, and Medical Assistant, which is also accredited by the American Association of Medical Assistants.

The Medical Record Technology program has double accreditation, too, having been approved by the American Medical Record Association as well as by the AMA. The Medical Laboratory Technology curriculum also has approval of the National Accrediting Agency for Clinical Laboratory Science (NAACLS) in conjunction with AMA. The Dietary program is approved by the Dietary Managers Association.

NON-DISCRIMINATION COMMITMENT

Broome Community College does not discriminate on the basis of race, sex, color, creed, age, national origin, disability, marital status, sexual orientation, or status as a disabled veteran or veteran of the Vietnam era in the recruitment of students; the recruitment and employment of faculty and staff; or the operation of any of its programs and activities; as specified by Federal and State Laws and regulations.

The designated coordinator for compliance with Title VI and VII of the Civil Rights Act of 1964, as amended, Title IX of Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, as amended, and Section 402 of the Vietnam Era Veterans' Readjustments Assistance Act of 1974, as amended, is the Affirmative Action/Equal Opportunity Officer.

For further information or questions, contact this individual weekdays, during regular College hours.

Affirmative Action Office
Library Room L210
(607) 778-5000 ext. 5392

The College reserves the right at any time to make changes deemed advisable or necessary. The College, moreover, shall not be responsible for any typographical errors contained in this catalog.

For information about the College, its program, and its admissions procedure contact:

Office of Admissions
Broome Community College
P.O. Box 1017
Binghamton, New York 13902
Phone (607) 778-5000 ext. 5001

Hearing impaired persons should phone:
(607) 771-5150 (Voice-TDD/TTY).

PARTNERS IN PROGRESS

Broome Community College

State University of New York (SUNY)

Broome County (College Sponsor)

Cover Photo By Anton Pratt



BROOME COMMUNITY COLLEGE

1992-93 CATALOG

A comprehensive Community College Supervised by SUNY (State University of New York) and Sponsored by the County of Broome

BROOME COMMUNITY COLLEGE, P.O. BOX 1017, BINGHAMTON, N.Y. 13902
PHONE (607) 778-5000
(607) 771-5150 TTY/TDD

HOW TO USE THIS CATALOG



To help readers find their way through the pages of this catalog, a few words of explanation may be helpful. The catalog is assembled in four parts as follows:

PART 1, which consists of pages 7 to 35, contains the policies, procedures and regulations of the College. And, as the accompanying table of contents shows, these are divided into such areas as admissions, expenses, financial aid, academic policies and student services.

PART 2, from pages 37 to 84, is a complete display of the College's various curricula, arranged in alphabetical order within Academic Division. It shows the courses taken by students in each semester, along with the number of class hours, laboratory hours and credits for each.

PART 3, from pages 85 to 122, contains descriptions of the College's courses. These are arranged in alphabetical order, according to curriculum codes. Readers should check the listing on page 86 for the subject area's corresponding code, in order to find the description easily.

PART 4, from pages 123 to 132, is a directory of the administration and faculty of the College. There is also information about the State University of New York, of which the College is a part. The Index is located on pages 133 to 135, indicating the topics covered in this catalog. The Academic Calendar is on page 136.

TABLE OF CONTENTS



Accreditation Inside Front Cover
Non-Discrimination Commitment Inside Front Cover
About Broome Community College 4
Mission and Goal Statements 5
Letter from the President 6

PART 1

Admissions Information 8
Expenses (Tuition and Fees) 10
Financial Aid 12
Programs of the College 15
International Studies Program 17
College-on-the-Weekend 17
Programs with Other Colleges 18
Learning Assistance Center 20
Learning Resources Center (Library) 21
Part-Time Studies 22
College Enhancement 23
Community Education 23
Academic Policies 24
General Education: Common Requirements 25
Academic Regulations and Grading Information 26
Student Services 30
Counseling Services 30
International Students 32
Student Activities 32
Placement Services 34

PART 2

Business 38
Accounting 39
Banking/Finance 39
Business Administration 40
Entrepreneurship 40
Management 41
Marketing 41
Retail Management 42
Accounting (Part-time Only) 43
Management & Marketing (Part-time Only) 43
Tourism & Hospitality Mgmt 44
Hotel/Restaurant Mgmt. (Hotel Emphasis) 44
Hotel/Restaurant Mgmt. (Restaurant Emphasis) 44
Travel and Tourism 45
Office Technologies 46
Executive Secretary 46
Word/Information Processing 47
Office Technologies Certificate 47
Health Sciences 48
Dental Hygiene 49
Dietary Manager Certificate 49
Medical Assistant 50
Medical Laboratory Technology 51
Medical Record Technology 52
Nursing 53
Physical Therapist Assistant 54
Radiologic Technology 55
Division of Liberal & General Studies 56
Associate in Arts 57
Associate in Science 57
Model Programs 59
Special Transfer Agreement Programs 61
Communication & Media Arts 62
Criminal Justice 64
Early Childhood 65
Fire Protection Technology 66
Individual Studies 67
Mental Health 69
Paralegal 68
Interior Design Certificate 69
Technologies, Engineering & Computing 70
Chemical Engineering Technology 71
Civil Engineering Technology 72
Computer Information Systems 76
Computer Studies 73
Computer Science 74
Computer Technology 76
Electrical Engineering Technology 78
Engineering Science 80
Mechanical Engineering Technology 81
Part-Time Programs in Industrial Technology 82

PART 3

Course Descriptions 85

PART 4

State University of New York 123
Administration, Faculty 125
College Enhancement 132
Index 133
Academic Calendar 136
Map of Campus Inside Back Cover

ABOUT BROOME

Broome Community College is a comprehensive community college. It has programs designed to prepare graduates for immediate employment and for transfer to four-year colleges and universities at the junior, or third year, level.

In addition to its daytime enrollment of about 3,500 full-time students last year, the College has a sizable number of part-time students. There were about 3,000 in the evening program last year and more than 2,000 took courses during the Summer Session.

The College is co-educational, publicly supported, and has historically attracted about two-thirds of its student body from Broome County and one-third from outside the county. The ratio has recently been closer to 80% and 20%.

The day student body can be classified into six parts, based on study objectives — the business programs, engineering and engineering technology curriculums, health science courses, liberal arts programs, computer studies, and special career offerings.

The College is sponsored by Broome County, supervised by the State University of New York, and accredited by both professional and educational organizations (see inside front cover). Its programs, moreover, are registered with the State Education Department.

HISTORY OF THE COLLEGE

The College graduated its first class in 1949. These students had entered what was then known as the New York State Institute of Applied Arts and Sciences at Binghamton in the fall of 1947. The original institute was one of five founded in the state in 1946, following the pattern of six agricultural and technical institutes which New York had established earlier in the century. The first programs offered were all occupational in nature and included Chemical, Electrical and Mechanical Technology, as well as Medical and Technical Office Assistant curriculums.

In 1953 New York relinquished operating control of the school to a new sponsor, the County of Broome, under provisions of the State Community College Law, and the name was changed to Broome County Technical Institute. In 1956 the name was again changed to Broome Technical Community College, to reflect the increasingly comprehensive nature of the educational offerings. In 1971 the name became Broome Community College as the scope of curriculums continued to expand.

The Civil Technology program was added to the five original curriculums in 1957, Dental Hygiene was introduced in 1956, and the Business programs were expanded to include offerings in Accounting, Marketing, and Engineering Secretarial in the early 1960's.

An important change in the College's program began in the late 1950's as a result of a new emphasis on university-parallel or transfer programs to compliment the College's occupational offerings. Engineering Science, the first two years of an engineering program, was introduced in 1958, Liberal Arts and Sciences (now Liberal and General Studies) in 1962; and Business Administration in 1963.

In the late 60's interest began to develop in the health science field. As a result, the College introduced a degree-granting program in X-Ray Technology in 1965, added Medical Laboratory Technology in 1966, Nursing a year later and Medical Record Technology in 1969. The Physical Therapist Assistant program is the newest of the Health Science programs as BCC continues to respond to the needs of the community.

Criminal Justice and Early Childhood have also been added, and degree programs in Individual Studies have been introduced, along with Office Services Assistant. Additional new offerings have more recently been added in Computer Studies and Travel and Hotel Technology.

For its first five years, the school was housed in a refurbished State Guard Armory in downtown Binghamton. This building was located across from the Forum and was gutted by fire in September 1951. For the next five years, Kalurah Temple (now the First Assembly of God building on Washington Street) and two other buildings in the city provided temporary quarters. In 1957 the College moved to its present campus just north of Binghamton. The first addition to the original campus came with the construction of Titchener Hall which was dedicated in 1963. The Library Building was completed five years later, and the Business Building opened in 1972.

A new Applied Technology Building has been completed and opened for classes at the beginning of the 1987 Spring semester, the Science Building has been enlarged, and expansion of the Student Center was completed in 1988.

Broome Community College
State University of New York

THE COMMUNITY

The community is an industrial and agricultural area in New York State's southern tier. It is in the approximate center of the state, measuring from east to west, and its southern extremity touches the Pennsylvania state line.

Binghamton is the principal city in Broome County, but it is only a part of the community known as the Triple Cities. Endicott and Johnson City, along with Vestal and other suburbs, help to make the community much larger in population and geography than the city of Binghamton.

Binghamton has a population of about 55,000 and Broome County's population exceeds 200,000. Diversified industry in the community includes such firms as IBM, General Electric, Link Flight Simulation, Savin, New York State Electric and Gas Corp., Universal Instruments, Dover Electronics and Endicott Johnson.

The College has become an integral part of the community since it was started in 1946. Many of the campus facilities are offered at nominal cost for use by responsible, non profit organizations, and most of the College's curriculums are designed to help fill the economic needs of the county.

THE CAMPUS

The College campus is located three miles north of Binghamton on Upper Front Street, which is Route 11 and Route 12 at this point running alongside of Interstate 81. Nine of the 12 buildings form two contiguous quadrangles to make a compact campus layout.

Most of the buildings are two stories high, of modern functional design, and made of brick with colored panelwall facing. They lie in a suburban setting in the virtual center of the College's 120 acres of land.

In addition to classrooms and laboratories, the campus has its own cafeteria, two gymnasiums, athletic fields and theater. These facilities add up to make the campus a multi-million dollar investment in the people of Broome and surrounding counties.

COMMUNITY COLLEGE

COLLEGE MISSION AND GOALS STATEMENTS

Broome Community College is a public, comprehensive, educational institution providing: (1) arts and sciences transfer degrees, (2) occupational degrees and certificate programs in health, business and technology, (3) developmental learning program, (4) student and administrative services, (5) continuing and community education programs.

As an open enrollment institution, Broome Community College provides quality, low cost, geographically convenient programs to varied student populations.

TRUSTEE GOALS

Goal Statement I: ACCESS

Broome Community College is a full opportunity college providing opportunities to all students who are seeking access to the College program.

Goal Statement II: DIVERSITY

Broome Community College provides a diverse academic and student development program, supported by appropriate educational and administrative services.

Goal Statement III: QUALITY

Broome Community College provides quality programs, and utilizes internal and external evaluation processes to preserve and improve program excellence.

Goal Statement IV: COMMUNITY

Broome Community College supports efforts designed to improve economic development and quality of life in the region. The College has a commitment to provide businesses, industries, agencies and other community members with educational courses, training programs and other services as needed.

Goal Statement V: RESOURCES

Broome Community College seeks and acquires the necessary levels of physical, fiscal and human resources requisite to preserve and improve program quality.

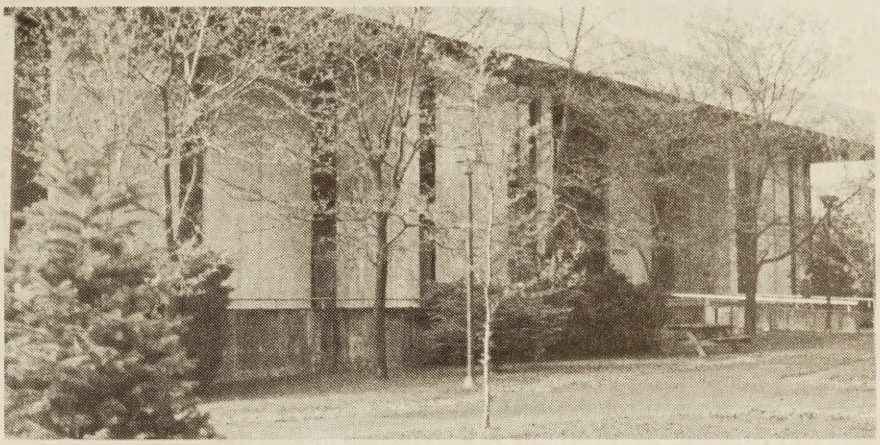
Goal Statement VI: GOVERNANCE

Broome Community College leadership collaborates with the numerous internal and external governance bodies to foster and sustain collegial rapport to ensure responsible decisions and actions.

Revised/Endorsed BCC Board of Trustees 12-19-85

AUTHORIZATION

Broome County is the sponsor of Broome Community College, which was established in 1946 and is one of the oldest community colleges in the State University of New York (SUNY) system. The College is governed by a Board of Trustees and funded by annual appropriations (operational and capital) from state and county funds. Students pay up to one-third of the College's operating costs through tuition. Five of the trustees are appointed by the County Executive, with approval of the County Legislature, four by the Governor and one is elected by the student body from among their peers. County and trustee governance policy and practice are based on a mutually determined modified "Plan C" resolution of County Government.



The College President is appointed by the College Board of Trustees, with approval of the Chancellor of the State University of New York and the SUNY Board of Trustees. His/Her direct supervisor is the chairman of the College Board of Trustees. The SUNY Chancellor provides an umbrella type of leadership to the president through a deputy for community colleges to ensure that appropriate SUNY policies and regulations and State Education Department (SED) guidelines for post-secondary institutions are followed.

Degree-granting authority for Broome Community College is given by the Board of Regents of the University of the State of New York, and the College's academic program is accredited by the Middle States Association of Colleges and Schools.

DEFINITION

Since the date of charter in 1946, as the New York State Institute of Applied Arts and Sciences at Binghamton, the College has moved from a limited access technical institute to a comprehensive community college with a Full Opportunity enrollment policy. Broome Community College is organized into four primary divisions: academic, administrative, institutional advancement and student services, each of which is administered by a Vice President reporting to the College President.

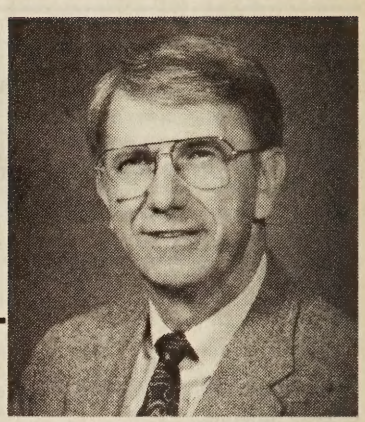
The Board of Trustees establishes College policy, and the Administration interprets and implements it, working in conjunction with the Sponsor, State University of New York (SUNY), the State Education Department (SED), and the various accrediting bodies that evaluate and make recommendations on the objectives and outcomes of the College program.

Broome Community College emphasizes classroom and applied laboratory educational activities rather than being a research institution. By developing a quality program and excellence in teaching, the College provides diversified educational opportunities to individuals of varied ages. A particularly attractive feature of the College is that it draws most students from the geographic region known as Broome County. It provides an important link with the communities of Broome County and the surrounding regions in the southern tier of New York State, making social, economic and cultural contributions to recipients of these services.

The College provides students with a broad spectrum of both humanistic and scientific/technological related competencies through its 32 degree-granting programs and its 10 certificate programs. These programs encompass six major areas, including Engineering and Engineering Technology, Business and Office Technology, Health Sciences, Liberal and General Studies, Computer Studies, and other occupational programs. We successfully place approximately 90% of our graduates in employment or continued study. The College is approved by the New York State Board of Regents to offer Associate in Arts (AA), Associate in Science (AS), Associate in Applied Science (AAS), and Associate in Occupational Studies (AOS) degrees.

Enrollment includes both full- and part-time students attending day and/or evening classes. Classes run from 8 a.m. to 10 p.m. weekdays, and there are a number of weekend classes.

From the desk of
Donald A. Dellow
BCC President



Broome Community College offers a quality educational experience providing you the opportunity to fulfill your goals and to reach your full potential. We have been doing this successfully for over forty years. Graduates from our institution have successfully proven their abilities in some of the finest universities and colleges in our country. Successful graduates have gone on to hold important positions in major corporations throughout the country. We at BCC are very proud of our alumni and their accomplishments.

A major reason for our success in providing this quality education over the years has been an expert and highly dedicated faculty. A commitment to small class size, individualized attention, and special needs assistance guarantees students the help they need in the classroom.

We feel that our students must have access to new technologies if they are to compete successfully in our global economy. With that belief, BCC can boast of having made a continuing major investment in modern technology and equipment.

BCC is also proud of its tradition of offering a variety of social, recreational and fine arts activities. We encourage our students to participate in student government, clubs and other activities and to enjoy the opportunity for a well-rounded education.

As you review the catalog, I think you will find that the programs of study we offer will allow for transfer to the university or college of your choice or for immediate entry into the work force. I urge you to contact our admissions office or the dean of any particular division to obtain more specific information about the programs in which you have an interest.

We at BCC are proud of our tradition and feel that we can offer you a quality education at a reasonable cost. Come take a look at us.

Sincerely,

Donald A Dellow

Donald A. Dellow
President

PART 1

Admission Information 8
Expenses (Tuition and Fees) 10
Financial Aid 12
Programs of the College 15
International Studies 17
College-On-The-Weekend 17
Programs with Other Colleges 18
Learning Assistance Center 20
Cecil C. Tyrrell Learning Resources Center (Library) 21
Part-Time Studies 22
College Enhancement 23
Academic Policies 24
General Education: Common Requirements 25
Academic Progress Policy 26
Academic Regulations 27
Grading Information 27
Student Services 30
Counseling and Student Development Center 30
Student Activities 32
International Students 32
Placement 34



ADMISSIONS

ADMISSIONS PROCEDURES

Students are selected as they apply, complete the admissions process, and are found suitably qualified for a particular program. The following items are required by the Admissions Office before a decision can be made on a student's application.

1. Application for Admission.
2. A non-refundable $10 application fee (If the applicant is reapplying, seeking admittance into a part-time Early Admissions Program, or is a qualified Educational Opportunity Program (EOP) applicant, this fee may not have to be paid.)
3. Official transcripts of high school and all college coursework. Applicants should arrange to have transcripts mailed directly from the high school/college attended to the Admissions Office.

Here are a few items to note concerning the application process:

1. Students who wish to enroll full or part-time in any curriculum must apply through the Admissions Office.
2. American College Testing (ACT) or Scholastic Aptitude Test (SAT) score reports are not required, but if either or both are available, they should be forwarded to the Admissions Office.
3. Recommendations from high school personnel are helpful, if available.
4. An interview with an Admissions Counselor at Broome Community College is desirable.
5. The postmark date of an application and the date an application folder is complete are important parts of the admissions process and help the College implement its first-come, first-served equal opportunity policy.
6. Most programs require that prerequisite courses be successfully completed by June 30 of the summer preceding fall enrollment.

Applicants should recognize that it is their responsibility, not a counselor's or admissions officer's, to complete the necessary forms for admission and to see that all required transcripts and/or other information are received and recognized by the Admissions Office. Completing the application process is the first step toward matriculation, which also includes being accepted into a curriculum and enrolling in coursework.

Acceptance into Broome Community College only applies to the particular semester designated in the acceptance letter. If one does not attend then and wishes to enroll in a future semester, he/she must reapply. Records are kept on file for two years, so the reapplication process usually involves filling out another application form, unless additional college coursework has been completed.

BCC Study Abroad Programs have separate admissions criteria (see page 17).

More information or answers to questions are available at the

Admissions Office
Broome Community College
P.O. Box 1017, Binghamton, N.Y. 13902
Phone: (607) 778-5000 ext. 5001

SPECIAL ADMISSIONS PROGRAMS

Early Admissions is a program for high achieving high school students who can benefit from taking college courses, full or part-time, before graduating from high school. While high school seniors are usually enrolled in this program, qualified juniors and sophomores may also be eligible.

Anyone interested in part-time Early Admissions should contact the Admissions Office or his/her high school counselor for the special application form. Full-time applicants should use the regular student application.

Educational Opportunity Program (EOP) The Educational Opportunity Program is designed for New York State residents with a high school diploma or its equivalent who fall within specific academic and financial guidelines. EOP provides economic aid, remedial and developmental assistance, with the amount of financial aid based on need. To be funded by EOP, students must provide appropriate income information as verification.

Students who do not require financial assistance under this program may benefit from the educational services offered by EOP. The EOP office is located in the Athletic Suite – Student Center West (778-5000 ext. 5220).

The BCC PACE (Public Assistance Comprehensive Employment) Program is a cooperative effort between the Department of Social Services and Broome Community College. It is geared specifically to help people with dependent children who are receiving public assistance and wish to return to school for vocational education.

The program helps students cope with the responsibilities of being both a parent and a student, plus help to coordinate child care and transportation needs. Those interested in this program may contact the BCC PACE Program, Room 213, Students Affairs Building, telephone: 778-5000 ext. 5350.

International Applicants (from other nations). Broome Community College is authorized under Federal Law to enroll non-immigrant alien students. Admissions requirements for foreign students or those whose native language is not English are on page 32.

Non-High School Diploma applicants may qualify for a high school equivalency diploma by successfully completing 24 credit hours of coursework at BCC or any college in a degree or certificate program. Students currently in high school or those having been out of high school less than one year, and under 19 years of age, typically cannot qualify for this program. Additional information is available at the Admissions Office.

TRANSFER CREDIT

Transfer Credit for students who have taken or are taking college level coursework is subject to the approval of the chairperson of the student's academic department at BCC. Grades earned will not be entered into the cumulative grade-point average at Broome Community College. Students must in all cases submit to the College Admissions Office official transcripts of all college level work taken and/or being taken at another college before formal acceptance will be granted.

BCC Residency Requirements. Students transferring courses to BCC will be required to complete the equivalent of a semester's course of study in residence at BCC for graduation. The determination of this minimum will be the responsibility of the department faculty sponsoring the curriculum, but in no case will the requirement be less than 12 semester credits. Ordinarily this means that the last 12 credits will be taken at BCC.

MMR IMMUNIZATION REGULATIONS

It is the intent of the administration of Broome Community College to comply and enforce the provisions of Public Health Law Article 21, Title IV, Section 2165-Immunization.

All students registering for 6 or more credits and attending New York State colleges and universities are required to show proof of immunity against measles, mumps, and rubella prior to attending classes. People born before January 1, 1957, will be exempt from this requirement.

Proof of immunity to measles will mean two doses of measles vaccine on or after first birthday and at least 30 days apart, physician documented history of disease or serological evidence of immunity. Proof of rubella immunity will mean one dose of rubella vaccine on or after the first birthday or serologic evidence of immunity. Proof of mumps immunity will mean one dose of mumps vaccine on or after the first birthday, a physician documented history of disease or serologic evidence of immunity.

ACADEMIC PREPARATION FOR ADMISSIONS TO COLLEGE CURRICULA

	CURRICULUM	REQUIRED High School subjects	RECOMMENDED High School subjects
	Business Adminstration **Travel & Tourism** **Hotel Restaurant Management** **Accounting** **Management** **Marketing** **Real Estate** **Entrepreneurship**	Sequential Math I, II,III for Business Administration Sequential Math, I, II for Travel & Tourism Sequential Math I for all other business programs	Sequential Math I, II, III for all Business Programs 2 units Science College preparatory courses
*	**Chemical Engineering Technology**	Regents Chemistry (Min. grade 74) Sequential Math, I, II, III or equivalent	Additional Regents Math, Science and Chemistry courses Physics
*	**Civil Engineering Technology**	Sequential Math, I, II, III or equivalent Regents Physics (Min. grade 65) or General Physics (Min. grade 74)	Additional Mathematics Physics Keyboarding
*†	**Computer Science**	Sequential Math I, II, III or equivalent Precalculus Math or Advanced Algebra Min. grade 74, all courses	Additional Mathematics Physics Computer Programming Keyboarding
*†	**Computer Technology**	Sequential Math I, II, III or equivalent Physics Min. grade 74, all courses	Additional Mathematics Computer Programming Keyboarding
*†	**Computer Information Systems**	Sequential Math I, II, III or equivalent. Int. Alg. may replace Seq. Math III Min. grade 74, all courses	Additional Mathematics Computer Programming Keyboarding
†‡	**Dental Hygiene**	Sequential Math I, or equivalent Biology, Chemistry (Regents or General)	College preparatory courses
*	**Electrical Engineering Technology**	Sequential Math I, II, III or equivalent (Min. grade 74) Regents Physics (Min. grade 65) or General Physics (Min. grade 74)	Additional Mathematics Technical courses
*	**Engineering Science**	Sequential Math I, II, III or equivalent Advanced Algebra or Precalculus Math Regents Chemistry Regents Physics Min. grade 80, all courses	Additional Mathematics Science courses Technical courses Computer Programming
	Liberal and General Studies including Communication & Media Arts	(Students should review degree/emphasis models on pages 63-65. These might help in selecting preparatory courses.)	4 Units Mathematics (Sequential I, II, III and Math 12). 3 Units Science 3 Units Foreign Language 3 Units Social Studies
	Criminal Justice **Early Childhood** **Fire Protection Technology** **Paralegal**	(Students should review program requirements. These might be helpful in selecting preparatory courses.)	3 Units Mathematics 3 Units Science 3 Units Social Science
*	**Mechanical Engineering Technology**	Sequential Math I, II, III or equivalent (Min. grade 74) Regents Physics (Min. grade 65) or Gen. Physics (Min. grade 74)	Additional Mathematics Technical courses Keyboarding
†‡	**Medical Assisting**	Sequential Math I or equivalent Biology (Regents or General)	Additional Mathematics Science courses Typewriting and/or Keyboarding
*†‡	**Medical Laboratory Technology**	Sequential Math I, II and III or equivalent Biology (Regents or General) Chem. (Regents or General by permission of Department Chair) Minimum grade 74 for Math and Chem.	Physics Additional Mathematics
†‡	**Medical Record Technology**	Sequential Math I or equivalent Biology (Regents or General)	Additional Mathematics Science, Chemistry Typewriting and/or Keyboarding
†‡	**Nursing**	Sequential Math I or equivalent Biology (Regents or General) Chem. (Regents or General) Min. grade 74, above courses	College Preparatory courses
	Office Technologies **Executive Secretarial** **Word Processing**	Sequential Math I or equivalent	2 units Typewriting 2 units Science 1 unit Communications or Business English
*†‡	**Physical Therapist Assistant**	Sequential Math I, II or equivalent Biology (Regents or General) Chemistry (Regents or General) Min. grade 74, all courses	Physics Additional Mathematics
†‡	**Radiologic Technology**	Sequential Math I, II or equivalent Biology (Regents or General) Physics (Regents or General) Chemistry (Regents or General) Min. grade 74 for Biology and Math Another Science course	Additional Mathematics College Preparatory Courses

ALL GRADES ARE FINAL CLASS AVERAGES AND NOT REGENTS EXAM GRADES

* BCC has a developmental program that enables students lacking the proper academic preparation for professional level courses to enroll in appropriate credit or non-credit courses that will qualify them. They can take these courses at BCC or elsewhere preceding their admission. The College reserves the right, however, to consider for enrollment in professional courses, only those applicants who have completed all prerequisites by June 30. Applicants who elect to take these courses during the spring and fall semesters would need three years to complete the curriculum.

† In these programs, Broome Community College gives priority for admissions to Broome County residents who will graduate from high school this academic year or are service veterans. Students interested in a degree in the Health Science or Computer Studies curriculums who enter the College in another program are cautioned that there is no guarantee that a petition to transfer will be approved. They should discuss the possibilities with the appropriate department chairperson.

‡ If pre-requisite courses are taken at BCC a grade of 2.0 or better is required.

EXPENSES

TUITION

***The tuition amount had not been officially established when this catalog was being prepared. The amounts in this column may be subject to increase.**

Tuition and fees are payable at the Student Accounts Office according to a payment schedule released by the College each semester. The responsibility for payment rests upon the student, who will be billed prior to the start of each semester. Both full-time and part-time students who have registered for courses will be "de-registered" if they fail to meet established due dates for tuition/fee payment.

Students who are administratively dropped for non-attendance during the semester continue to have a tuition and fee obligation.

STUDENTS CARRYING 12 OR MORE CREDIT OR CREDIT-EQUIVALENT HOURS
— considered full-time students

For New York State residents
With residency certificate.....$750* per semester
Without residency certificate.....$1,500* per semester
For out-of-state residents.....$1,500* per semester

Students admitted to the College prior to August 1 will be requested to submit a $50 tuition deposit. This payment will be applied toward the Fall Semester tuition bill for those students who register. Students who do not register for the Fall Semester can obtain a refund of the tuition deposit, through the end of the first week of classes, by submitting a request in writing to the College Controller. At the end of the first week of classes, the tuition deposit is non-refundable.

STUDENTS CARRYING FEWER THAN 12 CREDIT OR CREDIT-EQUIVALENT HOURS
— considered part-time students

For New York State residents
With residency certificate.....$61* per credit
Without residency certificate.....$122* per credit
For out-of-state residents.....$122* per credit hour

NOTE — See "credit equivalent" on page 20 for associated changes and information.

Many students may qualify for financial aid, some of which is applicable toward tuition. **See Financial Aid section on pages 12 through 14.**
SEE TUITION REFUND POLICY ON PAGE 11.

BOOKS, SUPPLIES, UNIFORMS AND OTHER STUDENT EXPENSES

Students are expected to purchase textbooks and related instructional materials for the courses they are enrolled in. These may be purchased at the Campus Store located in the Student Center Building. The average cost of textbooks and required supplies varies depending on curriculum and ranges between $200 to $700 per semester.

In the Health Science curriculums students will provide, at their own expense, their own transportation to off-campus locations for necessary clinical and other experience. Students are also required to have a physical examination which may cost as much as $100.

In addition, some curriculums require uniforms. Among these are Hotel Technology, Nursing, Radiologic Technology, Medical Laboratory Technology, Medical Assistant and Physical Therapist Assistant. Gym clothes are necessary for physical education classes. Dental instruments and pants-type uniforms are prescribed for Dental Hygiene students.

The following expenses are in addition to the usual cost of text books.

	Freshman	Senior
Civil Technology	$ 60	$90
Dental Hygiene	730	110
Electrical Technology	75	75
Mechanical Technology	45	60
Medical Assistant	75	30
Medical Lab Technology	52	0
Medical Records Technology	105	0
Nursing	435	0
Office Technologies	30	50
Radiologic Technology	100	75

COLLEGE FEES

Application fee.....$10*
**Late Registration.....10*
Vehicle Registration (Sales Tax Included).....9*
Transcript Fee.....2*
Returned Check Fee.....10*
Credit by Examination
Non-Laboratory Course.....25*
Laboratory Course.....Maximum 65*
$25 plus $10 for each clock hour of lab examination.
Credit by Evaluation.....50 plus*
(Portfolio Assessment)
In addition to the $50 fee there is a charge of $5 per credit hour. This $5 is refundable if credit is not granted. The $50 is non-refundable, however.
Laboratory Fees.....$12 or $18 per semester
(Depending on cost intensive nature of Lab)
Courses requiring outside services such as PED 170 Trail Riding, Music Lessons, etc. may require students to pay additional expenses directly to those service providers.

* These fees had not been officially established when this catalog was being prepared and are subject to increase.
** Late registration period begins on the first day of each semester.

RESIDENCY CERTIFICATE

To qualify for the resident tuition fee, a student is required by law to present **once each academic year** on or before registration a residency certificate indicating that he or she has been a legal resident of the State of New York for one year and of a county for six months.

Broome County Residents — Full-time students admitted to the College will be mailed a copy of the application for residency certificate prior to registration. This application must be completed and presented at the time of tuition payment.

Out-of-County Residents — Full-time students admitted to the College will be mailed a copy of the application for residency certificate prior to registration. The application must be completed, notarized and presented to the County Treasurer of the **County in which the student resides.** The County Treasurer will then issue a residency certificate to the student. This residency certificate must be presented at the time of tuition payment.

Part-Time Students must meet the same requirements as stated above. The application for residency certificate form is available at the Student Accounts Office.

The completed residency forms are required once each academic year.

Failure to comply with this requirement within 30 days of registration will result in assessment of non-resident tuition charges.

STUDENT FEES

*These fees had not been officially established when this catalog was being prepared and are subject to increase.

STUDENT ACTIVITY FEE

Full-Time Student$33* per semester
Part-Time Student$2* per credit hour

The activity fee entitles all students to admission to varsity games, convocations, dances and parties, as well as a subscription to the student newspaper and the opportunity to participate in a varied program of co-curricular activities, including intramural athletics.

The Student Activity Fee is budgeted and administered by the Student Government with the approval of the College Administration and in recent years has been apportioned to the following activities:

Campus Publications
Newspaper, Yearbook
Program Board
Speakers, Performers, Dances, Movies, Picnics, Special On and Off-Campus Programming
Club Council
32 funded clubs including most curriculum organizations
Athletics
13 male and female intercollegiate teams, coaching stipends, intramurals, administrative expenses
Student Government Association
Administrative expenses, vehicle maintenance, class gift, audit, supplies

SEE REFUND POLICY ON THIS PAGE.

ACCIDENT INSURANCE, HEALTH SERVICE FEE

Full-Time Student Accident Insurance$15* per year
Health Service Fee
Full-Time Students.....$5* per semester
Part-Time Students.....$3* per semester
(This is a compulsory fee and covers all services provided by the Health Service Office.)

Money collected from the Health Service fee is used for physician services, drugs, supplies, educational material, diagnostic equipment, special health programs and related Health Service expenses. The fee is non-refundable if the student withdraws from the College.

The accident policy covers the student for 12 months commencing the first day of classes for expenses incurred as a result of any accident, on or off campus. Maximum coverage is $2,000 per accident. Claim forms are available in the Health Service during the year, and must be filed with the Health and Wellness Resource Center before expenses will be paid. **Students who withdraw and wish a refund of their accident policy must apply directly to the insurance company.**

INTERNATIONAL STUDENT HEALTH INSURANCE

International students must show that they have health insurance coverage before they may enroll at the College. Health Insurance is available through the College at the following rates (which may be subject to change): Fall semester - $150*, Spring semester - $120*, and summer - $90*. Claim forms are available in the Health and Wellness Resource Center during the year. Students who withdraw and wish a refund of their health insurance fee must apply directly to the insurance company. Note that the "Health Insurance" mentioned in this paragraph is different from the "Health Service Fee."

MEDICAL INSURANCE

The College does not provide medical insurance, but it is available through a number of insurance companies.

GRADUATION/CERTIFICATE FEE

Graduation$18*
Certificate (part-time evenings only).....$8*

Paid during semester preceding graduation and is refundable if the student does not graduate or earn certificate.

ALUMNI LIFETIME MEMBERSHIP.....$25

Membership in the Broome Community College Alumni Association is optional. The lifetime dues are payable during the semester that you plan to graduate and they entitle graduates to complete Association benefits.

*These fees had not been officially established when this catalog was being prepared and are subject to increase.

REFUND POLICIES, PROCEDURES

TUITION REFUND POLICY

Fall and Spring Semesters

Students who **officially withdraw** from classes during the first four weeks of a **semester** will be entitled to tuition refunds on the following basis - 100% refund during the first week, 50% during the second week, and 25% during the third and fourth weeks. After four weeks of the semester there will be no refunds.

College-on-the Weekend

Refunded only at 100% through the Friday following the first weekend of classes (0% refund thereafter).

NOTE — Participants in the New York Civil Service Employees Association Labor Education Action Program (LEAP) will be subject to the tuition refund regulations specified in the LEAP guidelines.

Summer Session

Students who withdraw from Summer Session classes will be entitled to a 100% refund during the first week of the term. After that, there will be no refunds.

FEE REFUND POLICY

The student activity fee is refundable according to the same schedule as tuition.

REFUND PROCEDURE

An application for refund of tuition and fees must be made in writing in the Registrar's Office (W-206). The application must be on the College form provided. The date on which the application is filed is considered the official date of the student's withdrawal and any refund to which the student may be entitled is computed using that date.

OTHER PROCEDURES

Students who defer tuition on Financial Aid and who then become ineligible to receive that aid or any portion of it will be subject to an immediate obligation for payment and/or collection of tuition, fees and disbursements. The College reserves the right to use whatever collection procedures it deems appropriate to satisfy any outstanding debt. The total outstanding debt may include additional costs incurred due to collection activities.

TUITION DEPOSIT POLICY

Students admitted to the College prior to August 1 will be requested to submit a $50 tuition deposit. This payment will be applied toward the Fall Semester tuition bill for those students who register. Students who do not register for the Fall Semester can obtain a refund of the tuition deposit, through the end of the first week of classes, by submitting a request in writing to the College Controller. After the end of the first week of classes, the tuition deposit is nonrefundable.

FOR GENERAL INFORMATION CONCERNING CREDITS, TRANSCRIPTS AND TUITION FOR STUDY ABROAD, INTERSESSION AND SUMMER SESSION SEE PAGE 17.

FINANCIAL AID

Considerable financial aid is available at Broome Community College, and the College maintains a Financial Aid Office to help students. Information and applications for financial aid are sent to students who are seeking enrollment when they apply for admission. Any part-time student planning to take six credit hours or more may qualify for financial aid by formally applying and being accepted into a degree or certificate program.

Financial aid at BCC falls into three broad categories — grants that do not have to be repaid, loans on which interest rates are usually low and that have to be repaid after graduation or leaving college, or part-time employment called Work-Study. Assistance usually comes from a combination of these resources, commonly referred to as a "financial aid package."

STUDENT AND FAMILY RESOURCES

A student's financial need is a term used to describe the funds required by a student to pay for his/her college education in excess of the amount that he/she and parents can afford to pay. Financial need is determined by using a standardized formula, which defines the "initial" or "demonstrated" need. The formula:

Cost of attendance (including tuition, fees, books, room, board, transportation, etc.)

–Family Contribution (based on student's and parents') assets, income, household size, number in college, liabilities, etc.

=Financial Need

The Financial Aid Office at Broome Community College operates on the premise that all parents and students have a responsibility to contribute as much as they can toward the cost of the student's education. This contribution plays the primary role in determining the actual initial need.

To qualify for financial aid, a student must be enrolled in a degree program of the College and be taking six credit hours or more, in addition to having initial or demonstrated need. This need can be met in a number of different ways - a combination of grants, loans and work-study funds in varying amounts of each. This combination is put together by the financial aid administrator and is called a "financial aid package."

Many students would be unable to attend college without financial aid. However, no matter when application for financial aid is made, dispersal of awarded money is not always made on an "as needed" basis. Therefore, every student should have sufficient resources available for living and educational expenses for eight weeks into a semester.

ESTIMATING EXPENSES

Below is a chart showing the estimated average costs for the 1992-93 college year for student expenses. It covers a 9-month period which is the length of the college year, September to May.

	Living w/ Parent Dependents	Not Living w/Parent No dependents
*Tuition	$1,500	$1,500
*Fees [1]	91	91
Books	500	500
Transportation [2]	600	600
Personal Expenses	750	750
Rent	750	3,312
Food	750	1,080
Child Care [3]	NA	NA
Total	4,941	7,833
*Non-NY State Resident: [4] (Additional Tuition)	$1,500	$1,500
Total	$6,441	$9,333

* The tuition and fees amounts had not been officially established when this catalog was being prepared. The amounts may be subject to increase.

NOTES—

1) Lab fees are $12 or $18 per lab (not included in the above estimates).
2) The transportation allowance may be increased depending on where the student is residing.
3) A child care allowance is added to the student's budget only when documentation of these expenses is submitted to the Financial Aid Office.
4) An out-of-state resident must pay additional non-resident tuition.

— ALL COSTS ARE SUBJECT TO CHANGE —

TUITION DEFERRAL PAYMENT

All Financial Aid funds will be applied to the recipient's outstanding tuition and fees for the current semester. Those applicants without finalized financial aid packages may be able to defer tuition payment by making arrangements with the Financial Aid Office.

Broome Community College does not defer SUMMER tuition based on a TAP award or on a student loan.

RIGHTS AND RESPONSIBILITIES OF FINANCIAL AID RECIPIENTS

Student recipients of financial aid are the beneficiaries of money made available by a variety of agencies - federal, state, institutional, and/or private. The act of accepting a financial aid award signifies that the recipient knows about, understands, and is willing to comply with both the rights and the responsibilities involved with that award. Thus, it is the recipient's **RIGHT TO KNOW:**

1-What federal, state and institutional financial aid programs are available.
2-The deadlines for submitting application forms for each assistance program.
3-The cost of attending the college and the refund policy.
4-The criteria used by the college to determine academic eligibility.
5-What resources (such as parental contribution) are considered in the calculation of financial need and how much of that need, as determined by the college, has been or will be met, and how (loan, grant and/or work-study).
6-How much of the financial aid will have to be repaid, and what portion is a grant (gift-aid). If the aid is a loan, the recipient should know what the interest rate is, the total amount that must be repaid, the repayment procedures, the length of time allowed to repay the loan and when repayment is to begin.
7-How the college determines whether the student recipient is making satisfactory progress and what happens if not.

It is the recipient's **RESPONSIBILITY to:**

1-Know and understand fully the financial aid program and one's specific financial aid package before signing forms.
2-Make sure that all application forms are completed accurately and submitted, on time, to the right place.
3-Pay special attention to and accurately complete the application for student financial aid. Errors can result in long delays in the receipt of financial aid. Intentional misreporting of information on application forms for federal financial aid is a violation of law and is considered a criminal offense subject to penalties under the U.S. Criminal Code.
4-Return any and all additional documentation, verification, correction, and/or new information requested by either the Financial Aid Office or the agency to which the application is submitted.
5-Read and understand all forms that one signs and keep copies of them.
6-Accept responsibility for all agreements signed.
7-Notify the lender of changes in name, address or school status, if one has a loan.
8-Perform the work that is agreed upon in accepting a College Work-Study award.
9-Know and comply with the deadlines for application and/or reapplication for aid.
10-Know and comply with the school's refund procedures.

HOW TO APPLY FOR FINANCIAL AID

TO BE CONSIDERED FOR FINANCIAL AID, STUDENTS MUST APPLY EACH ACADEMIC YEAR.

FEDERAL AND STATE GIFTS

All financial aid applicants will be expected to apply for two major sources of financial aid: the federal government's Pell Grant and New York State's Tuition Assistance Program (TAP). Out of state residents should contact their State Educational Agency or the Financial Aid Office for information on state grant assistance from their state of residence. Although the College provides information, applications and assistance, these funds are not generated by the College and must be applied for directly by the student to the agency. Students may apply for the Pell and TAP grants with the New York State Family Financial Statement (FFS).

Part-time students who enroll for at least 3 but less than 12 credits may be eligible for New York State's Aid for Part-Time Study (APTS) program. Unlike TAP, students must apply directly to the College for determination of eligibility.

Applications and information regarding these and other programs are available at the Financial Aid Office (Wales Building, Room 101).

CAMPUS-BASED FINANCIAL AID

To be considered for both the federal government's Pell Grant AND financial aid administered by the College (Campus-Based Aid), students must submit the Family Financial Statement (FFS) to ACT Student Financial Aid Services and the BCC Application for Financial Aid to the Financial Aid Office. By filing the forms outlined above, students will be considered for the following campus-based financial aid in addition to the federal government's Pell Grant:

FEDERAL CAMPUS-BASED AID

Perkins Loan (Formerly National Direct Student Loan-NDSL)
College Work Study (CWS)
Supplemental Educational Opportunity Grant (SEOG)

INSTITUTIONAL CAMPUS-BASED AID

BCC Foundation Grants

The College administers a number of programs which have been established by private individuals, companies, and organizations. These scholarship and grant programs have varying eligibility requirements. Students who wish to apply for these special scholarships should complete the FFS and the BCC Application for Financial Aid.

PRIORITY FUNDING DATES

Fall Semester.....April 1
Spring Semester.....November 1

Incoming students should apply for financial aid when they apply for admission. Because all campus-based funds are limited, students are strongly encouraged to submit the appropriate forms at least four weeks before the above priority dates.

Completed applications received prior to April 1 will be given first priority. Applications received after this date will be considered as long as funds are available and will be completed in date received order.

The FFS should be mailed to ACT Student Financial Aid Services before March 1 to be received at the College by April 1.

VERIFICATION

Once the Financial Aid Office has received the results of your processed application from ACT Student Financial Aid Services, you may be selected for a process called verification. This is a procedure used to check the accuracy of the information you reported on your federal financial aid application. You may be required to bring or send any supporting documentation that is necessary to verify the information you reported. If selected, you must complete the process before your financial aid can be awarded.

NOTIFICATION OF DECISIONS

Students are generally notified of the action taken on their application shortly after June 30. Students who apply late will be notified as folders are completed. An explanation of student's rights and responsibilities is sent to all financial aid recipients at the time the award is made. Interested students may receive a copy of this information before an award is made by contacting the Financial Aid Office.

If a student's request for aid is denied, the reasons for the decision are explained. Students may request an appeal on financial aid decisions by writing a letter to the Director of Financial Aid.

NOTE — Students who have been administratively dropped from their class(es) for non-attendance will receive a reduced financial aid award. If financial aid has already been disbursed, a repayment of a portion or all of these funds may be owed to the College.

SATISFACTORY ACADEMIC PROGRESS FOR TAP, APTS & TITLE IV AID

Federal regulations require aid recipients to maintain "satisfactory academic progress" before receiving Title IV aid (Pell, Perkins Loan, Work-Study, SEOG, Stafford Student Loan [formerly Guaranteed Student Loan - GSL], SLS and PLUS). The College also requires satisfactory academic progress before students may receive grant assistance from the BCC Foundation or Educational Opportunity Program (EOP). The guidelines used to determine academic progress are outlined on page 26 of the catalog.

Students who have been placed on academic probation may continue to receive financial assistance while on probation. These students have one semester to achieve the minimum standards before facing dismissal from the College.

Students who have been academically dismissed will be denied aid until such time as they can meet the criteria set forth for satisfactory academic progress. Guidelines for appealing the decision of academic dismissal are outlined on page 26 of the catalog. Students who successfully petition for a waiver of dismissal may be eligible for financial aid. Students who are allowed to continue taking classes but are not in good academic standing are not eligible to receive financial aid. Only one petition of academic dismissal based on unusual circumstances is allowed during a student's educational career.

The College has also adopted New York State Tuition Assistance Program (TAP) and Aid for Part-Time Study (APTS) guidelines which require good academic standing for students to continue receiving TAP & APTS. Contact the Registrar's Office in Room 206 of the Wales Building for a copy of the guidelines.

PACKAGING POLICY

At Broome Community College the equity concept of financial aid packaging is used. Eligible students are funded on a need basis and a first-come, first-served order.

The Pell Grant and the New York State Tuition Assistance Program (TAP) represent the floor of the package followed by any employment, loans and grants available.

This kind of financial aid packaging ensures that any student who wishes to attend a post-secondary institution will have the opportunity to obtain the needed funding.

An example of the equity concept:

(1) Total Student Costs (Budget)
(2) Subtract Resources:
 a) Parental Contribution
 b) Student Contribution ($700, $900 or $1,200) or Student Income/ Asset Contribution (whichever is greater)
 c) Other Resources

 Initial Financial Need
(3) Subtract:
 a) Tuition Assistance Program (TAP) Grant or Estimate
 b) Pell Grant or Estimate

 Unmet Need for Campus-Based Aid
(4) Subtract:
 a) Educational Opportunity Program (EOP)
 b) Perkins Loan, (Formerly NDSL)
 c) College Work Study
 d) Supplemental Educational Opportunity Grant (SEOG)
 e) BCC-Grant in Aid

 Unmet Need *

* Most students are able to satisfy their unmet need through the Stafford Student Loan Program. The amount of unmet need may vary from year to year.

GRANTS

NOTE — The following financial aid information is current as of Fall 1991. Due to the nature of financial aid programs some of this information may be changed during the academic year. Please contact the Financial Aid Office for updated information.

ELIGIBILITY	AMOUNT PER YEAR	WHERE/ HOW TO APPLY
TUITION ASSISTANCE PROGRAM (TAP)		
Full-time student at any accredited college in New York State. Resident of New York State. Income and academic guidelines involved.	$100 to $4125, not to exceed tuition. Based on income.	New York State Higher Educational Services Corp. (HESC), 99 Washington Avenue Albany, N.Y. 12255 Forms available in BCC Financial Aid Office

Summer TAP Awards are available for students taking 6 or more credits and who are full time the semester before or after the summer semester.

AID FOR PART-TIME STUDY (APTS)		
Part-time students and residents of New York State. Must enroll for at least 3 but less than 12 credit hours. Income and academic guidelines involved.	Amount of tuition or less depending on need and availability of funds.	Forms and further information available in BCC Financial Aid Office. Applications must be submitted no later than the end of the tenth week of classes.
EDUCATIONAL OPPORTUNITY PROGRAM (EOP)		
Full-time and half-time students with financial need and less than an 82 high school average. Family income must be below a specific level.	Varies according to individual need. Average of $200 per student per academic year.	Application available in the Educational Opportunity Program Office at BCC.
PELL GRANT PROGRAM		
Accepted and enrolled full-time or half-time undergraduate students who demonstrate financial need.	From $225 to $2,400. Cannot exceed 60% of the cost of college expenses.	Forms available in BCC Financial Aid Office and in high school guidance counselor offices after Jan. 1.
SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)		
For full-time or half-time students with demonstrated high financial need. Must also be Pell Grant eligible.	Up to $4000 depending upon need and cost of college expenses.	Student must submit an ACT Family Financial Statement and BCC Application for Financial Aid. Forms available in BCC Financial Aid Office and in high school guidance offices after Jan. 1.
BCC FOUNDATION GRANTS		
Full-time or half-time students on first-come, first-served basis.	Varies according to individual need.	Submit an ACT Family Financial Statement and BCC Application for Financial Aid. Forms available in BCC Financial Aid Office.
NYS AID FOR NATIVE AMERICANS		
Full-time and half-time students.	Varies according to individual need and type of award.	Must file annually with the Bureau of Indian Affairs. Applications are available from the US Department of Interior, Bureau of Indian Affairs, Federal Building Room 523, 100 South Clinton Street, Syracuse, NY 13202.

LOANS

ELIGIBILITY	AMOUNT PER YEAR	WHERE/ HOW TO APPLY
PERKINS LOAN		
For full-time or half-time students with demonstrated high financial need. Student borrows from the college on own signature. Awarded on a first-come, first-served basis.	From $200-$1,500 per year. Maximum aggregate amount is $4,500.	Students must submit an ACT Family Financial Statement and BCC Application for Financial Aid. Forms available in BCC Financial Aid Office and in high school guidance offices after Jan. 1.
STAFFORD STUDENT LOAN		
For full-time or half-time students. Student borrows on own signature from a participating bank. Student must show financial need.	Maximum of $2625 per year for the first and second year of an undergraduate program, and $4000 per year for the remaining undergraduate years — not to exceed a cumulative of $17,250.	New York State residents indicating an interest in a Stafford Loan by checking the appropriate box on an ACT Family Financial Statement, will receive a loan application by mail. Stafford Loan applications can also be obtained at most banks or credit unions. Processed applications must be on file in Financial Aid Office, along with BCC Application for Financial Aid.
SUPPLEMENTAL LOANS FOR STUDENTS (SLS)		
For students who are financially independent of their parents (must be a high school graduate or have a GED).	Maximum of $4000 per year. Total loan limit is $20,000. May not exceed $4000 in any given 7 month period.	NYS residents can apply on Stafford Student Loan application by checking appropriate box. Applications are available at most banks or credit unions from state of residence.
PARENT LOAN FOR UNDERGRADUATE STUDENTS (PLUS)		
Loan program for parents of dependent under-graduate students enrolled at least half-time.	Maximum $4000 per year per student. Total loan limit is $20,000 per student.	Applications are available at most banks or credit unions from state of residence.
PAULINE PARKER LOAN		
For full-time students who are Broome County residents, under 25 years of age, and in financial need.	$1,000 maximum per year. No more than $500 per semester. No interest charge.	Forms available in BCC Financial Aid Office.
EMERGENCY LOANS		
For full-time or half-time students in financial emergencies (i.e., an unforeseen expense affecting the ability of the student to attend college). Sponsored by the BCC Foundation.	$250 maximum. No interest charge. Repayment in 30 days.	Forms available in BCC Financial Aid Office. Student must substantiate need with Financial Aid Officer for all loan requests and obtain a cosigner.

EMPLOYMENT

ELIGIBILITY	AMOUNT PER YEAR	WHERE/ HOW TO APPLY
COLLEGE WORK-STUDY (CWS)		
For full-time or half time students with financial need. Awarded on a first-come, first-served basis.	Students may work up to 20 hours a week when classes are in session or up to 37 1/2 hours a week during vacation. Wage: Minimum.	Student must submit an ACT Family Financial Statement and BCC Application for Financial Aid. Forms available in BCC Financial Aid Office.

FOR ADDITIONAL INFORMATION CONSULT THE BCC FINANCIAL AID BROCHURE OR THE FINANCIAL AID OFFICE.

PROGRAMS OF THE COLLEGE

FULL OPPORTUNITY PROGRAM

Broome Community College has a Full Opportunity Program, which is designed to give every individual a chance to fulfill his/her own personal goals and potential.

This means that everyone who is a Broome County high school senior scheduled to graduate in June or a veteran from Broome County with a high school diploma is given priority for admission until March 1 and is guaranteed admission into the College, but not necessarily assured of space in the program of his/her choice. To be admitted into any program of study, all applicants must meet the academic requirements of that program. When an individual does not have the required academic background for a particular curriculum, he/she will be accepted into a program or selection of courses for which he/she is qualified if space is available. Some students may require more than two years to complete a program of study.

BCC offers admission to the College and opportunities in any aspect of the College's business regardless of the applicant's race, color, creed, national origin, age, sex, marital status, sexual orientation, or disability.

DEGREE PROGRAMS

Graduates of Broome Community College receive associate degrees, and the courses of study are organized into four divisions-Business and Office Technologies; Technologies, Engineering and Computing; Health Sciences; Liberal and General Studies. Liberal Arts courses are included in all curriculums, and all students must meet the College's General Education requirements. Applicants to the College should consider carefully the type of program they wish to pursue, for the nature of the offerings makes it difficult to switch from one curriculum to another after commencing studies.

BUSINESS, OFFICE TECHNOLOGIES AND TOURISM AND HOSPITALITY MANAGEMENT

The Business curricula are designed primarily to prepare graduates for immediate employment in one of 10 fields-Accounting, Banking, Hotel/Restaurant Management, Travel & Tourism, Entrepreneurship, Management, Retail Management, Marketing, Word Processing, and Executive Secretarial. In addition, there is an 11th option, Business Administration, that combines more university parallel preparation with a minimum of job-oriented courses. This program is intended for students who plan to continue their college education even though they may want to work for a while before transferring to a four-year college. In addition students in the other 10 programs will find ample college transfer opportunities.

Even though it is possible to transfer to four-year institutions from all programs, each student's transfer credits are evaluated by the four-year institutions and the number of credits accepted may vary.

HEALTH SCIENCES

Opportunities for men and women interested in the health sciences field are provided in seven areas - Dental Hygiene, Medical Assisting, Medical Laboratory Technology, Medical Record Technology, Nursing, Physical Therapist Assistant and Radiologic Technology. Graduates are prepared to work immediately after graduation in physicians' or dentists' offices, laboratories, schools, nursing homes or hospitals. A.A.S. graduates of these programs are qualified to take whatever licensing or certification examination their professions require as a result of the state/national accreditation held by all BCC Health Science programs. Graduates may be eligible to transfer to upper division colleges and universities. The College also offers a Dietary Manager Certificate program for those working in the field.

LIBERAL AND GENERAL STUDIES

University parallel curricula in Arts and Sciences, and Special Career Programs of an occupational nature are included in this division. Curriculums in Arts and Sciences prepare students for transfer to four-year colleges and universities. While the aim of liberal learning is to broaden human perspective and deepen understanding through the study of philosophy, history, natural sciences, literature and the arts, students who identify career/professional goals early can also begin to develop appropriate academic concentrations. Liberal and General Studies degree programs are also offered for those seeking immediate employment. Refer to the career models on pages 59 through 61 in this catalog.

The College offers, through its Special Career Programs Department, degree opportunities in five other academic areas - Early Childhood, Criminal Justice, Fire Protection Technology, Individual Studies and Paralegal Assistant. All lead to the Associate in Applied Science degree, and Individual Studies students may earn either that degree or the Associate in Science degree, depending on their program of study.

TECHNOLOGIES, ENGINEERING AND COMPUTING

In the area of technical education, the College offers 9 programs. One, Engineering Science, is in effect the first two years of a four year engineering curriculum. Students who do satisfactory work in it should experience little difficulty in transferring to engineering colleges at the third-year level.

Four others are designed to educate engineering technicians in the fields of Chemical Engineering Technology, Civil Engineering Technology, Electrical Engineering Technology and Mechanical Engineering Technology. Students in these programs are prepared for employment in various types of technical work immediately after graduation, although many students do transfer to four-year colleges.

The Computer Studies Department offers three programs - Computer Science, Computer Technology and Computer Information Systems. The Computer Science Program is designed for transfer to four-year colleges, while graduates of the other two are prepared for immediate employment.

The final program in the technical field offered at the College is Industrial Technology which is designed for people already in the work force. Emphases are offered in several technical disciplines.

CERTIFICATE PROGRAMS

Broome Community College also has certificate programs which are less than two years in length, have more specific objectives than the associate degree offerings, and consist of about one year of college credit. Some are designed to prepare students for jobs that require specialized higher education, but not necessarily a college degree; some provide students with an opportunity to upgrade their academic backgrounds or expand their qualifications for a particular field of study; and some offer college credits and additional training of people already working in the field.

Most of the certificate offerings carry college credits, and they can lead a person into some of Broome Community College's degree-granting curriculums. They can be taken on a full-time or part-time basis, and most of them are offered in the evening although some are available through day classes. No specific high school courses are required for enrollment.

Further details, a listing of courses, and literature about most of these certificate programs are available in Room 101 of the library.

CERTIFICATE PROGRAMS

Business Emphasis
- **Accounting**
- **Management**
- **Marketing/Sales/Retailing**

Early Childhood
Criminal Justice
Dietary Manager
Fire Protection Technology
Industrial Technology Emphases
- **Chemical**
- **Civil**
- **Electrical**
- **Mechanical**
- **Production Management**
- **Quality Assurance**

Interior Design
Liberal Arts
Office Technologies (9 months)
Paralegal Studies

HONORS PROGRAM

The Honors Program is designed for the student who wants to be involved in her/his own education, and is open to qualified students from most departments of the College. Participants are challenged to expand their understanding of life and reality through specially designed honors courses in English, History and Social Sciences, as well as extra curricular activities, close contact with honors faculty, and involvement with other highly motivated students.

Student's benefits include an increased awareness of political, economic, and social issues, development of critical thinking skills, and preparation for creative leadership in the 21st Century, as well as Honors diploma, an important asset in the competition for placement at selective four-year institutions.

To apply, students who believe they meet the qualifications below may obtain an application through high school guidance departments or from Dr. JoAnne Maniago, Program Coordinator, Honors Program, Broome Community College, Binghamton, New York 13902.

HONORS PROGRAM ADMISSIONS REQUIREMENTS — HIGH SCHOOL SENIORS

1) GPA of at least 3.2 (80 average).
2) SAT combined score of 1,050 or above with no subscore below 450.
 OR
 ACT composite score of 24 or higher with Math and English subscores of at least 21.
3) Two letters of recommendation:
 One from a teacher.
 One from a non-scholastic source such as an employer, club advisor, coach, or volunteer supervisor.
4) Students from New York - Regents Diploma.

FOR NON-TRADITIONAL OR TRANSFER STUDENTS

Because BCC has a large number of persons enrolled who do not come directly from high school, we want to make it possible for them to participate in the Honors Program: (1) Full time students having completed one semester at Broome with a 3.5 GPA. (2) Part-time students enrolled in a minimum of a 6 hour load per semester having accumulated 12 hours of credits with a 3.5 GPA. (3) Transfer students having either of the above.

ALTERNATIVE AND INDIVIDUALIZED LEARNING

Broome Community College considers various non-traditional learning activities for credit. By documenting and demonstrating the learning that has taken place, matriculated students may be awarded academic credit.

The divisional dean is the initial contact for students interested in obtaining more information about non-traditional study and examination programs. Students will be assisted in determining whether or not such study or evaluation would be worth pursuing.

The academic department, sponsor of the student's degree program, is responsible for integrating any credit achieved in this manner into the student's academic program. All procedures entail fees. Inquire in your divisional office. Following are examples.

ADVANCED PLACEMENT EXAMINATION (AP)

The College will recognize for credit the AP examinations of the College Entrance Examination Board. A score of three or above is generally acceptable for credit, but each academic department establishes its policy. Laboratory courses may require additional lab work for full credit for a college course. Credit awarded will be handled as a transfer credit.

COLLEGE PROFICIENCY EXAMS (CP)

The CP exams of the University of the State of New York will be recognized for credit upon approval by the appropriate department. Credit awarded will be handled as transfer credit.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

The College will recognize successful achievement at or above the 50th percentile on CLEP subject exams in accordance with SUNY and American Council of Education guidelines. Approval of credit for degree requirements or electives is determined by the appropriate department. Credit approval will be handled as transfer credit. Under certain circumstances, a department may accept general examination scores.

BCC CREDIT BY EXAMINATION (CBE)

The College in many instances provides for full or part-time BCC matriculated students credit by examination for knowledge gained outside the traditional classroom situation. A letter grade will be posted on the student's transcript upon completion of the exam. Guidelines for this procedure are available from the College's chairpersons and deans. If a student receives an "F" grade after normal completion of a course, no credit by examination may be given in that subject.

PORTFOLIO ASSESSMENT
(Special Individual Assessment)

The College will evaluate for credit various types of learning acquired outside the usual classroom environment. Particular criteria for awarding credit may be applied by an academic department. Approval of credit is the responsibility of the appropriate department. Students must clearly identify what has been learned. Contact the divisional dean for additional information. (Fees, page 10.)

SPECIAL ASSESSMENT OF EXPERIENTIAL LEARNING

The College will evaluate for credit various types of learning acquired through participation in learning experiences, or training provided by business, industry, unions, professional societies, governmental agencies or the military. Particular criteria for awarding credit may be applied by an academic department, and approval of credit is the responsibility of the department. Contact the divisional dean for additional information.

SELF-INSTRUCTIONAL LANGUAGE PROGRAM

The College offers an instructional program to groups of 3-5 students in Arabic, Chinese, Greek, Hebrew, Irish, Japanese, Korean, Lithuanian, Polish, Russian, Swedish, and Welsh. Students must be highly motivated as the instructional program relies upon self-study combined with tutorials. Emphasis is on speaking. Broome Community College adheres to the standards and guidelines of the National Association of Self-Instructional Learning (NASILP).

CREDIT FOR NON-ACADEMIC EXPERIENCE

Credit may be given for relevant experiential learning acquired in various contexts. A number of methods exist for receiving this credit, and details are available from the dean of the division in which one is pursuing a degree.

Students may also find it advantageous to request credit by examination for a course in a field in which they have extensive knowledge and/or experience. By passing an examination, one can receive course credit. However, before being permitted to take an examination, students must satisfy a faculty committee as to their qualifications. Credit by examination is given only to matriculated students and a fee is charged. (See page 10.)

SEMESTER ABROAD PROGRAMS

BCC provides formal, structured programs lasting for a semester, a year or two years, in England, France, Spain, Italy, Cyprus, Ecuador, Greece, Ireland, Portugal, Sweden, Israel, Mexico, Scotland, Germany and Switzerland. Students study a full semester program (usually 15 to 18 credits) that is arranged prior to their departure at affiliated schools, institutions, colleges or universities abroad.

The subject areas range from liberal arts courses to specialized programs, such as criminal justice, international business and languages. Costs of these programs vary greatly, with emphasis on high quality programs at public institutions. The costs approximate those at U.S. public colleges. For 1991-92, the cost of a full semester in the popular program in England was about $3,600. This includes room and board, all tuition cost, and many extras.

Many BCC students will find their academic and personal lives enriched through a cultural experience difficult to match in a conventional two-year course of study in this country.

ADMISSION TO PROGRAMS

Admission to the College does not automatically ensure admission to BCC programs overseas; separate application must be made. Students will be evaluated on their academic ability, motivation, maturity and potential adaptability to a foreign culture. In addition to BCC approval, interviews with personnel from affiliate consortium institutions may be required. All programs are available to students from any college or the general public. At least one-half of the participants last year were community residents who went on short-term programs.

JANUARY & SUMMER SHORT PROGRAMS

During each academic year BCC conducts a variety of short-term programs in January and in the summer months. Students at BCC who have been introduced to study abroad through these short-term programs, usually two to three weeks in length, often decide to study overseas for a semester or year.

The short-term courses have grown in scope, as well as in number. During recent intersessions, students were able to study Italian Culture and Art in Italy and Tropical Field Ecology in the Virgin Islands. Costs for these programs last year started at $1,100. A list of the January offerings is usually available by November.

The summer programs vary in length from two weeks to one month. Recent offerings have included Italian Culture and Language, and Field Ecology in Australia.

During the summer, there are special month-long programs at the University of Madrid for Spanish students and the University of Caen for French students. The cost of these programs was $3,295 each for 1991 but some students are able to qualify for scholarships under a special grant from the Spanish or French governments. Similar programs are offered in Italy and Germany. A full list of courses being offered during the summer is usually available in March.

STUDENTS FROM OTHER NATIONS
(See Page 32.)

CREDITS, TRANSCRIPTS AND TUITION

For Study Abroad, Semester, Intersession and Summer Session

Students register at BCC and pay the appropriate tuition, which in many cases covers the instructional cost abroad. Students are monitored through consortium offices at the college they attend. Upon the successful completion of the formal program or after fulfillment of the contract, students will receive a BCC transcript reflecting the grades achieved or the course equivalents for the work done through the contract, greatly facilitating transfer of credits to other American institutions.

Full-time students registering for courses that are scheduled other than in the Fall or Spring Semesters will be charged at the part-time tuition rate. Sessions other than fall and spring semesters will be called Summer Session and Intersession. Students earning credits in Summer Session and Intersession courses may earn up to 18 credits in the fall or spring semesters or up to 21 credits with permission of the appropriate dean and department chairperson.

Students who wish to earn more than six hours during any of the Summer Session terms or the Intersession are required to obtain the approval of the appropriate dean and department chairperson. The refund policy is not in effect for students taking courses in Intersession. Refund policies in semester length programs are determined by the receiving foreign institutions.

Grades received for all courses taken from the beginning of the Fall Semester through the end of that semester will be considered first semester grades. Grades received for all courses taken from the end of the first semester through the end of the second semester (even if taken in January or abroad) will be recorded as second semester grades.

Summer Session is treated like a third semester. Its dates begin after the Second Semester Master Schedule of courses is complete through the beginning of the fall semester (grades for all Summer Session terms under the transcript heading, Summer Session). All credits earned are Broome Community College credits, which allows students to use their financial aid packages for semester length programs.

Students may earn up to 18 credits per semester, leading to an associate degree. Credits for Intersession/short-term programs range from one to six, depending on the time spent abroad, and the instruction offered in the program.

For additional details about any of the above programs, students should contact the International Studies Program Office at Broome Community College in Titchener Hall (Phone 778-5000 ext. 5228).

COLLEGE ON THE WEEKEND PROGRAM

College-on-the-Weekend is one way Broome Community College has responded to the needs of a growing number of non-traditional students. Many people wishing to continue their education just cannot find the time during the week. Even evening classes pose a problem for working parents raising families.

Now you can earn a degree, part-time, attending classes every third weekend — six weekends each trimester. You can take one, two or three classes per term and earn your Associate's Degree in as little as 2½ years. Weekend students may start the program at the beginning of any trimester which begins in September, January and May of each year.

Take one, two or three courses and progress at your own pace. You can even combine College-on-the-Weekend with weekday evening courses at BCC and move along more rapidly. Now you can return to college on your terms — with a schedule that fits your lifestyle.

Presently BCC College-on-the-Weekend students may earn an Associate in Applied Science Degree in Business with an emphasis in Management and Marketing or Accounting.

Various courses will be scheduled each trimester to ensure that all students will be able to take all necessary courses during the fall, spring or summer terms. Students with business courses from other colleges should call about credit transfer.

Weekend Services

BCC student services available to College-on-the-Weekend students:

- Financial Aid
- Library Services
- Lab Proctors
- Lounge
- Learning Assistance Center
- Study Areas
- Computers

COOPERATIVE PROGRAMS WITH OTHER COLLEGES

Broome Community College has direct transfer agreements with a number of four-year colleges to facilitate the acceptance of BCC graduates into the third year of study. The number of colleges with which BCC has such agreements is increasing each year. Further details are available in the Counseling and Student Development Center (Wales Building, Room 200).

IN ENGINEERING SCIENCE

The Engineering Science Department has a joint admissions program with SUNY Binghamton (Watson School). It has a General Articulation Agreement with the Association of Engineering Colleges of New York State and separate agreements with Wilkes College and the Clarkson University School of Management. Contact the Department of Engineering Science for more information.

WITH SUNY BINGHAMTON

TRANSFER AGREEMENT

All Broome Community College students who have graduated or will graduate with an AA or AS degree with a grade point average of at least 3.0 will be admitted, upon application, as matriculated students in Harpur College of SUNY at Binghamton as space permits. Those students graduating with the above degrees but with a grade point average between 2.6 and 3.0 are usually admitted. Others, including those with an AAS degree, should contact the SUNY at Binghamton Office of Admissions. Admitted students will be granted junior-year standing upon presentation of 56 or more transferable credits.

CROSS-REGISTRATION

Full-time BCC students enrolled in full-time studies (12 or more credits) may cross-register at SUNY Binghamton for one course each semester. The courses for which they cross-register must be courses that are not available at Broome Community College. No additional tuition is necessary. Additional information is available in the Registrar's Office in the Wales Building, Room 206.

WITH KEYSTONE JUNIOR COLLEGE

BCC students may also cross-register at Keystone Junior College in LaPlume, PA for one course each semester. The courses for which they cross-register must be ones that are not available at Broome Community College, and they can take them without paying additional tuition. Additional information is available in the Registrar's Office (Wales Building, Room 206).

WITH COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY (SUNY)

Pre-Environmental Science and Forestry

This program is designed for those students who ultimately desire a B.S. degree in Environmental Science and Forestry (ESF), which is an upper division/graduate center.

After the first two years of study at Broome Community College, transfers to ESF may apply to a variety of programs at Syracuse which may include the **biological sciences** (botany and forest pathology, entomology, zoology, wildlife biology, silvics, pest management); **chemistry** (natural and synthetic polymers, biochemistry and natural products, environmental); **forest engineering, paper science and engineering; wood products engineering; and forestry** (resource management, forest resource science, management science, environmental forestry, applied resource management). The program in **landscape architecture** leads to a B.S. degree in environmental studies and, after one additional year, a Bachelor of Landscape Architecture degree.

Persons planning to transfer should follow the program requirements in consultation with BCC's Pre-Environmental Science and Forestry campus advisor for selection of electives which may vary according to the curriculum at ESF.

Successful graduates of Broome Community College's Pre-Environmental Science and Forestry Program generally gain admission to the SUNY College of Environmental Science and Forestry with full junior class status.

Contact Anthony Lotempio (Science Building, Room 216).

ARTICULATION AGREEMENTS

Broome Community College has special articulation agreements with many 4 year colleges for the purpose of gaining as many transfer credits as possible for BCC graduates who wish to study at those schools after completing their studies at BCC. Students are encouraged to contact their department chairperson, divisional dean or the Counseling and Student Development Center for more information.

GUARANTEED TRANSFER PROGRAM WITH STATE UNIVERSITY OF NEW YORK

Students who graduate from Broome Community College with Associate in Arts or Associate in Science degrees are guaranteed admission at the third-year level, to a four-year college of the State University of New York. This guarantee has some limitations, and details are in the Counseling and Student Development Center (Wales Building, Room 200).

ONE-PLUS-ONE PROGRAMS

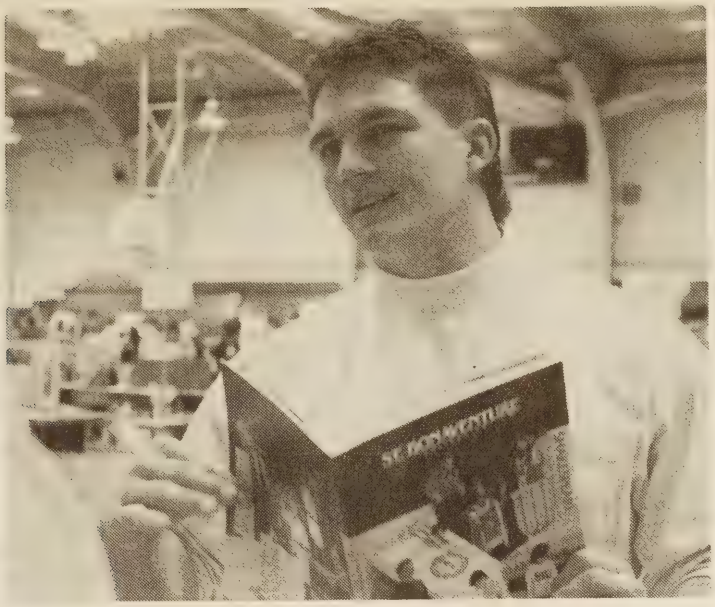
Broome Community College has One-Plus-One Programs with other two-year colleges to enable a student to attend BCC for one year and then transfer to the other college for the second year for the Associate in Applied Science degree. This program permits students to begin studying at BCC for a degree in a field not offered at this college. By taking the BCC courses that one needs for the particular degree involved, residents of Broome County can enjoy the advantage of living at home during one year of their college attendance. Students taking these One-Plus-One Programs are Liberal and General Studies students at Broome Community College because most of the courses they take at BCC are Liberal and General Studies courses.

Check with the Liberal and General Studies Office for more information about these programs.

THREE-PLUS-ONE PROGRAM

Broome Community College has a Three-Plus-One Program with the Department of Nursing at SUNY - Brockport. After completion of the AAS degree in Nursing at Broome Community College, students take additional courses at Broome Community College during the third year. After successfully completing entrance exams, the student is admitted to SUNY - Brockport for completion of the Bachelor of Science in Nursing degree.

SPECIAL TRANSFER PROGRAMS



Broome Community College graduates will be able to transfer to a wide range of baccalaureate programs and institutions. Listed below are some colleges with whom BCC has special arrangements.

Contact the Admissions Office at BCC, the appropriate department chairperson, and/or a counselor in the Counseling and Student Development Center for specific information on course requirements. Many four-year colleges require specific grade point averages for transfer and eligibility.

Association of Engineering College of New York State Engineering Science

Bentley College
Accounting, Computer Information Systems, Economics, Finance, Law, Management, Marketing, Quantitative Analysis

Clarkson University
School of Management

College of St. Rose
All AA, AS Degrees

Cornell University (College of Human Ecology)
Human Development and Family Studies

Fairleigh Dickinson University
AAS Degree in Civil, Electrical, Mechanical Engineering Technology

LeMoyne College
Any baccalaureate degree program with AA or AS in Liberal and General Studies, Business Administration, Engineering Science

Marist College
Parallel programs in Business (Marketing, Management) Accounting, Engineering Technology, (Civil, Electrical, Industrial and Mechanical)

Rochester Institute of Technology
AA, AS, AAS Degrees

St. John Fisher College
AA, AS degree programs, Liberal and General Studies, Business Administration, Engineering Science

SUNY College at Alfred
AAS in Electrical Engineering Technology, Mechanical Engineering Technology, Civil Engineering Technology.

SUNY College at Binghamton
Watson School of Engineering, Harpur College, School of Nursing

SUNY College at Brockport
Nursing, Business Administration, Criminal Justice, Liberal and General Studies and LGS Mental Health Emphasis degrees will be accepted in Brockport's Recreation and Leisure program and Social Work program

SUNY College at Cortland
Elementary Education, Computer Science

SUNY College of Environmental Science and Forestry
Biological Sciences
Chemistry
Construction Option (Civil)
Landscape Architecture
Forest Engineering
Paper Science and Engineering Wood Products

SUNY College at Fredonia
AA degree into Business Administration or Liberal and General Studies or Radio and Television.
AS degree into Math, Physics, AAS in Early Childhood into Early Childhood Education

SUNY College at Oneonta
AAS in Accounting, Marketing, Management, Data Processing, and AS in Computer Science

SUNY College at Oswego
Business Administration
AAS in Vocational - Technical Education

SUNY College at Plattsburgh
Any Associate's Degree that leads to a baccalaureate program

SUNY College at Potsdam
Any Associate's Degree that leads to a baccalaureate program

SUNY College at Purchase
AA, AS degree programs in Liberal and General Studies

SUNY College of Technology (Utica)
AAS in Business, Electrical, Civil and Mechanical Engineering Technology, Industrial Technology, Nursing.
AS in Computer Science, Engineering Science, Liberal and General Studies.
AA in Liberal and General Studies.

Syracuse University
School of Management, Engineering Science

Trinity College
AA, AS, AAS degrees, concentrates on Liberal and General Studies, Sciences, Business Administration, Engineering Science

SUNY Health Science Center at Syracuse
Cytotechnology, Medical Technology, Physical Therapy

Utica College of Syracuse University
AA, AS graduates in following concentrations - Liberal and General Studies, Business Administration, Engineering Science

Waynesburg College
AS Degree graduates accepted, transfer credits determined on individual basis

West Virginia University
Dental Hygiene

Wilkes University
Accounting, Business Administration, Computer Science, Engineering Science, Liberal and General Studies, Nursing

Roger Williams College
AS degree graduates accepted. Transfer credit determined on individual basis

LEARNING ASSISTANCE CENTER

Department Chairperson,
Steven Natale
1st Floor Cecil C. Tyrrell
Learning Resource Center
Telephone 778-5000 ext. 5038

The courses and programs offered by BCC's Learning Assistance Center are designed to help students realize their academic goals regardless of prior preparation.

DIAGNOSTIC TESTING AND COURSE PLACEMENT

The Learning Assistance Center administers placement tests in reading, writing, and mathematics to every entering student.

The information gained from these tests is used along with other records to help place students in appropriate courses. Every effort is made to place students in courses in which they can succeed. In some cases, students will be required to enroll in non-credit developmental courses.

DEVELOPMENTAL COURSES

Various courses are offered through the Center for those desiring skill improvement or review. Some of these carry credit; others do not. The non-credit courses listed below prepare students for credit level work in the basic skills areas of mathematics, writing and reading. These non-credit courses are equivalent in time to credit bearing classes and are applicable toward financial aid and athletic eligibility.

Developmental courses graded on a letter basis (A, A–, B+, etc.) will be calculated in the student's semester grade point average although they may not be used for the determination of Academic Honors such as Dean's or President's List. (See page 27.)

	Courses	Credit or Equivalent	Catalog Page
ENG 090	Basic Language Skills	0 or 3	101
MAT 090	Arithmetic and the Language of Algebra	0 or 4	106
MAT 092	Intro to Concepts of Algebra	0 or 4	106
MAT 096	Metric Conversions & Dosages	0 or 2	106
MAT 099	Elementary Algebra	0 or 5	106
RDG 090	Reading Fundamentals	0 or 3	115
RDG 092	College Prep Reading	0 or 3	115
RDG 094	College Vocab Skills	0 or 2	115

NOTE: ENG 090, MAT 090, 092, 096, RDG 090, 094 have strict attendance requirements, whereby students may be deregistered from the class for poor attendance. This deregistration may result in a loss of financial aid. Consult course outline and/or instructor for further details.

Other developmental courses may be credit bearing. Students should pay close attention to catalog information pertaining to these courses and should consult their department chairpersons or Learning Assistance personnel about the acceptability of credit in a particular degree program.

	Courses	Credit or Equivalent	Catalog Page
BIO 102	Preparatory Biology	4	86
CHM 102	Preparatory Chemistry	4	90
LRS 101	Study Management	0.5	105
LRS 102	Memory and Exams	0.5	105
LRS 103	Textbook Mastery	0.5	105
LRS 104	Listening and Notetaking	0.5	105
LRS 105	Learning Skills	2	105
LRS 106	College Success	3	105
LRS 120	The Art of Thinking	1	105
LRS 130	Intro to Microcomputers and Word Processing	2	105
LRS 150	Advanced Learning Skills		105
PHY 100	Preparatory Physics I	4	112
SAC	Human Development Courses	2-3	116

MATHEMATICS LAB

Tutorial instruction is provided to students experiencing difficulty with their math courses at the College. Students may use the Math Lab on a drop-in basis five days and four evenings during the week. A staff of both professional and peer tutors is available to work with students individually, assisting with difficult concepts encountered ranging from basic arithmetic through calculus. In addition, small group tutoring with a professional tutor is offered twice a week for specific courses determined each semester.

READING AND STUDY SKILLS LAB

Professional reading teachers are available in the Reading and Study Skills Lab to assist all students in improving their reading or in mastering the art of studying efficiently and effectively. Students may choose to work with a study skills specialist or to work independently on multi-media programs on such topics as efficient time management, effective notetaking techniques, reading and remembering textbook material, or improving performance on exams. Computer programs on vocabulary improvement and speed reading are also available. Instruction is arranged by appointment according to the student's schedule.

WRITING CENTER

At the Writing Center, professional tutors — who are writers as well as teachers of writing — help students learn techniques and strategies applicable at every stage of the writing process. In addition, peer tutors work in the Center as part of an advanced writing course. All students, including those who are already confident, able writers, can benefit from the Center's services.

Although the Center exists mainly to provide individual and group tutorials, the Center also offers workshops, such as the Research Paper Workshop and the Editing Workshop, which are open to every student. In addition, the Center co-sponsors an annual writing contest and an organization for creative writers.

The Center also maintains an extensive collection of books about writing and generates instructional booklets such as guides for writing summaries and book reviews.

PEER TUTORING

The Faculty-Student Association and the Student Support Services Program fund a peer tutoring program, which offers one to one or small group instruction to any student experiencing difficulty with a course. Tutoring takes place in the Learning Assistance Center, and tutors are trained and supervised by the Program Coordinator.

The Center is open from 8:30 a.m. to 8:00 p.m. Monday through Thursday, and from 8:30 a.m. until 4:00 p.m on Friday. Detailed brochures describing the various programs are available at the reception desk at the Center or you may call 778-5000 ext. 5038 for information.

SUPPORT SERVICES FOR DISABLED STUDENTS

Coordinator—Bruce Pomeroy
Student Support Services Program
Library, Room 101
Telephone 778-5000 ext. 5150
TDD/TTY 771-5234

In addition to regular student services on campus, disabled students entering college may receive special assistance. The office for differently abled students offers additional help in achieving educational goals.

Such services as interpreters, readers and notetakers are available, and adjustments for program accessibility like re-scheduling classes and elevator use are also arranged. Through the Student Support Services Office in the Learning Assistance Center, students may use various aids including the Visualtek Machine, talking calculators, a Kurzweiler machine, large print reading materials and taped books.

Broome Community College is committed to meeting the support needs of its disabled students. However, auxiliary services such as notetakers, taped books, and special

testing provisions require advanced planning to be implemented as smoothly as possible. The College urges any student who has need of educational support services to give the Coordinator for Disabled Student Services as much advance notice as possible. This will allow Broome Community College to have quality support services in place in time for the student's needs. Phone 771-5234 (TTY), or write Student Support Services c/o Broome Community College.

In order to avoid duplication of services and to assure that disabled students at Broome Community College receive all the auxiliary aids for which they qualify as speedily and as efficiently as possible, the College requires that any disabled student who is to receive specialized college assistance attempt to enroll with appropriate federal and state agencies (e.g. VESID, the Commission for the Blind, and the Veterans' Education Assistance Agency). The Coordinator for Disabled Student Services is available to assist any student who requests in applying to state and federal agencies.

A booklet describing supportive services is available from the Student Support Services office. This booklet is also available on audio tape.

STUDENT SUPPORT SERVICES PROGRAMS

With an open door admissions policy, Broome attracts many students with varied needs. The Student Support Services Program provides assistance to a percentage of these students who have experienced difficulty in achieving academic success. The program is aligned under the Academic Affairs Division and works closely with the Learning Assistance Center.

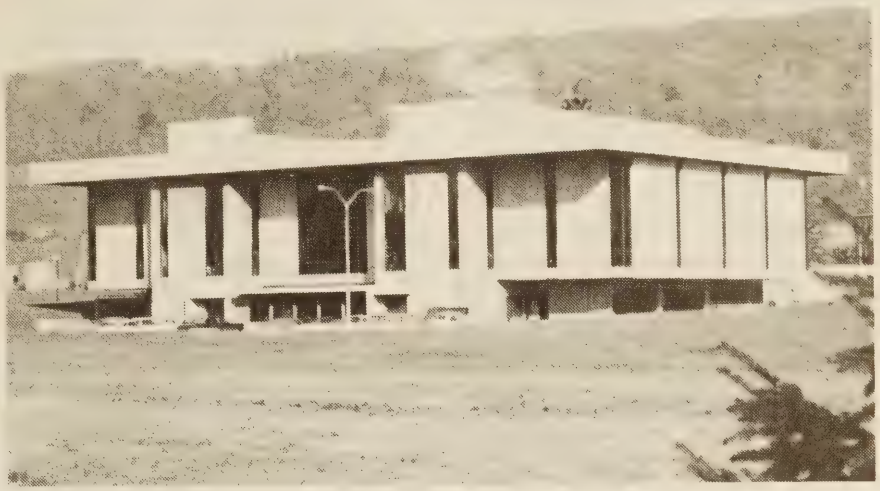
The Student Support Services Program provides a variety of support services to students who qualify. These services include: academic advisement, tutorial assistance, diagnostic test interpretation, transfer information, referrals, notetaking and reading services for the handicapped, a peer counseling program, and other student services.

The office is located in the library, room 101, and is open from 8 a.m. to 5 p.m. Phone number 778-5000 ext. 5150, 771-5234 (TTY/TDD).

TDD/TTY TELEPHONES

TDD/TTY telephone units are available in many campus offices: The Student Support Services Office (771-5234), Counseling and Student Development Center (771-5210), Admissions (771-5001), Student Accounts (771-5230), Registrar's Office (771-5027), and The Little Theater (771-5191) are equipped with TDD/TTY units.

LEARNING RESOURCES CENTER (LIBRARY)



The Cecil C. Tyrrell Learning Resources Center provides a wide variety of learning resources. Housed in the center are the Library, the Audio Visual Department, the Learning Assistance Center, and various specialized learning laboratories, as well as offices and classrooms.

A staff of professional, technical and clerical specialists offers the students a broad range of services designed to meet their academic needs. Typical library services include lending of materials, information services, access to other learning resource centers, interlibrary loan service, assistance in research techniques, and instruction in the use of materials and equipment. Coin operated photocopies are also available.

The Learning Resources Center's primary function is to support and supplement the academic programs of the College and to provide a center for serious study, research and learning. Requests for assistance are welcomed by the staff.

The facilities have a capacity of nearly 600 users. Individual carrels, lounge furniture, multiple person tables and stools, and small group study rooms are available. Audio-Visual equipment including projectors, tape and record players, micro-film reader/printers, as well as more specialized machines, are located in the center for student use. Some typewriters and equipment for students with vision disabilities are also available.

The Learning Resources Center was constructed in 1967-68 and named for the College's founding president in 1972, the year he retired after 26 years in the position. The building is an attractive and modern three-story structure, with more than 40,000 square feet of space devoted to its learning facilities.

The Learning Resources Center collections offer many different types of print and non-print materials carefully selected to meet the academic needs of students at college level. The print collections consist of nearly 70,000 books, 500 current periodicals and serials, plus over 10,000 pamphlets.

More than 3,000 audio recordings, slides, filmstrips, maps, microfilms, multimedia kits, and other types of media add several thousand more items to the collection. An extensive file of college catalogs is maintained.

Most materials including magazines may be borrowed for use outside the center, although some restrictions are placed on reference and reserve materials. The basic loan period for books is four weeks, and for magazines and video tapes, one week.

Overdue fines are not charged as a rule, but the College reserves the right to do so with proper notification.

Library cards will be issued to students upon request and are required for borrowing materials. Proper identification is necessary to obtain a library card. Failure to return borrowed materials promptly upon notice can result in withholding of grades, transcripts and other services.

Lost and damaged materials must be replaced or paid for at current replacement costs, and the borrower is responsible for all materials charged out on his/her card.

The center is open for full service during the following hours:

Fall and Spring Semesters

Monday-Thursday	7:30 am to 10 pm
Friday	7:30 am to 5 pm
Saturday	12 noon to 5 pm
Sunday	4 pm to 10 pm

Holiday and Intersession

Monday-Friday	8 am to 5 pm

Summer Session

Monday-Thursday	8 am to 10 pm
Friday	8 am to 5 pm

The center is closed on all days that the College is officially closed.

PART-TIME STUDIES

Anyone in the community may enroll as a part-time student and BCC attracts a large number each year. The part-time enrollment accounts for almost 50% of the student body. These are mostly "non-traditional" students, men and women who also work full time. The College has a strong commitment to serving the part-time student.

PART-TIME STUDENTS

...are those who take fewer than 12 credits per semester, usually one or two courses. At BCC, part-time students can:

- Enroll in credit courses, or non-credit mini courses.
- Take day, evening or weekend courses.
- Attend classes in the fall, spring or summer semester.
- Earn a degree or not, as they see fit. Certificate programs are available.
- Apply for financial aid if carrying 3 or more credits.
- Receive academic advising and personal counseling.
- Borrow books from the College library.
- Receive Veterans' benefits.
- Transfer credits to BCC earned at another college.
- Participate in the College-on-the-Weekend Program.

NOTE:

The College conducts a special Information Session for new part-time students at the beginning of the fall and spring semesters to inform prospective students how to get started at BCC, what programs are available, and how to register. Contact the Information Center at 778-5000 ext. 5150 for further details.

Part-time students seeking degrees are required to complete the College's General Education Program. Refer to page 25 of this catalog, and seek guidance from your academic advisor or the Information Center for Evening and Part-Time Students.

ADMISSION

To be admitted to a degree program at the College, all students, including part-time day and evening students, must submit an admissions application form to the Admissions Office (Wales, Room 102). Refer to page 8 of this catalog for admissions procedures.

Although part-time students can take courses without being admitted, it is generally in the student's best interest to seek admission early in their studies. This will ensure more accurate and comprehensive advisement. Also, financial aid programs require formal admission to a degree program.

PLACEMENT TESTING

Part-time students enrolling in degree programs are required to demonstrate basic skills competency for college level work either through the placement test or by passing a particular course. Students who are not pursuing degrees may benefit from the results of the placement test and are encouraged to contact the Learning Assistance Center (778-5000 ext. 5038) or their advisor for testing information.

REGISTRATION

First-time students and continuing students may register in person or by mail. After posted billing dates, only in-person registrations are accepted and payment must be made at the time of registration.

CONTINUED ENROLLMENT

Those who are continuing their studies at the College as degree candidates should keep in contact with their academic advisors and follow the individual outline for their program of study. If one does not attend for a full semester or longer, and wishes to resume a program of study, he/she must reapply. The student must consult an advisor on current requirements and changes if any exist for the program.

Continuing students have the opportunity to advance register for subsequent semesters, thereby affording them a better selection of courses.

RESIDENCY CERTIFICATE

See Page 10.

MMR IMMUNIZATION REGULATIONS

See Page 8.

GENERAL EDUCATION REQUIREMENTS

See Page 25.

TUITION

See Pages 10 and 11.

ADVISEMENT

Academic advisement is available for all Broome Community College part-time and evening students through the Information Center located on the main floor of the Library, Room 101. Academic advisors for each department are available during scheduled day and evening hours to accommodate student inquiries. Contact the Information Center to make arrangements for individual advisement sessions. Counseling services are also available Monday through Thursday evenings in the Wales Building, Room 200.

FINANCIAL AID

FINANCIAL AID is available to part-time students who take 3 or more credits* and enrolled in a degree or certificate program. Many companies have tuition reimbursement plans, and employees should familiarize themselves with their company's policy. The College has a Financial Aid office in the Wales Building, Room 101 to answer questions about this. If one's company is paying, a letter to that effect should be brought to Student Accounts when the bill is due.

*Out-of-state residents must carry six credits.

DECLARATION OF GRADUATION CANDIDACY

Students intending to complete all degree requirements within a given semester are required to declare their intention to do so by filing an "Application for Graduation" with the Office of the Registrar. Students who have previously indicated their plans to complete in a specific semester will be mailed the application form at the beginning of each semester.

Applications for Graduation should be filed by:

Spring Semester — March 15th

Summer Semester — July 15th

Fall Semester — October 15th

Students filing after these dates will be considered as graduates for the semester but may not receive their diploma in a timely fashion or have their name indicated in the Commencement Booklet (Spring semester). No application for candidacy will be accepted after the last day of classes of the term being applied for. Students applying after that date will be considered as a graduate of the following semester.

GRADUATION

See page 28.

COLLEGE ENHANCEMENT

BCC FOUNDATION

The Broome Community College Foundation, Inc. is a not-for-profit corporation that raises private funds to enhance educational programming at BCC. Gifts to the Foundation provide assistance in three major areas: STUDENT SUPPORT, for needy students in the form of grants-in-aid, or scholarships to student achievers; FACULTY DEVELOPMENT grants that are used by faculty to update their knowledge; and SPECIAL PROJECTS grants to the College to help fund projects for which public dollars are unavailable or insufficient.

These private funds are raised from alumni, parents, faculty/staff, community friends, corporations, private foundations, and civic and professional organizations. The development program is designed and implemented by a small staff of professionals who are assisted by about 150 community volunteers for a successful fund raising effort on behalf of BCC.

The ALUMNI AFFAIRS OFFICE, administered by the Foundation, maintains and updates alumni records, sponsors alumni activities, and alumni publications. BCC Alumni are also asked to give support to the College through mail and phonathon campaigns managed by the alumni staff.

Founded in 1965, the BCC Foundation has worked since that time to raise private funds for BCC. In addition to gifts made annually, the Foundation has raised and manages an endowment of about $4 million. Income from these invested endowed funds is used to support the College, while the principal is maintained in perpetuity.

Gifts to BCC whether they are cash, securities, real property, books, equipment, works of art, or any gift-in-kind is administered by the Foundation, which serves as a conduit for all gifts to the College. Gifts to the BCC Foundation are tax deductible.

ALUMNI

The Broome Community College Alumni Association provides the link between the College and its 25,000 alumni. Any BCC graduate may become a member by paying the one-time, lifetime fee of $25.00

The Alumni Association provides the opportunity to renew old friendships through the Annual Dinner Dance, the Annual Membership Meeting, and curriculum reunions. Alumni may also keep in touch through the locater service in the Alumni Affairs Office and share their achievements in the BCC News.

Membership benefits also include low-cost group life insurance, discount travel programs, discounts on nationally advertised merchandise, and free or reduced admission on a variety of social, cultural and athletic activities.

For membership information contact the office of Alumni Affairs in the Wales Administration Building, Room 107.

FACULTY-STUDENT ASSOCIATION

The Faculty-Student Association, Inc. of Broome Community College is an educational corporation which provides a variety of auxiliary services for the benefit of the College community. The College Bookstore, child care, and food vending are among the services provided. The F-SA also administers the annual Student Activities budget.

The Association is governed by a Board of Directors. Net earnings from operations are used to enhance the College through a Support and Assistance budget.

CAMPUS STORE

The Campus Store has two areas of operation, the Textbook Department and the General Merchandise Department. They are located across from one another in the lobby area of the Student Center.

In the Textbook Department students may purchase the books required for their courses. It opens one week prior to the start of classes for advance sales. To avoid standing in long lines the first few days of classes, students are urged to take advantage of the early sales period. It is advisable to purchase all required textbooks early in the semester. Unsold textbooks are returned to publishers shortly after the semester begins.

The General Merchandise Department offers such classroom supplies as notebooks, paper, pens, binders, art and drafting materials, recycled paper products as well as computer diskettes, supplies and a variety of software programs. In addition, backpacks, imprinted sportswear and gift items may be purchased. The general book area offers a line of study aids, reference titles, classics and bestsellers. Magazines and newspapers are also available.

The Campus Store hours of operation are posted at each store entrance. Customers who have questions, special requests, problems or suggestions should feel free to contact the Campus Store Director.

CHILD CARE

For many students, a major concern is finding a safe place for their children during class time. The Faculty-Student Association helps to meet that need by operating a child care service which is located close to campus.

The purpose of the service is to provide quality care in an educational, instructive and warm environment. The staff is genuinely interested in the emotional, intellectual and physical growth of each child.

Space is limited, and reservations are required. For additional information, call 722-8625.

COMMUNITY EDUCATION

Broome Community College has an extensive non-credit community education program of courses, seminars and special events. The program receives about 10,000 registrations each year in its open enrollment programs, serving the community's career development, cultural, and recreational needs. For information call 778-5000 ext. 5012.

CAREER DEVELOPMENT

This category consists of courses and seminars designed to update professional skills or introduce participants to new career areas. Included are Computer Center offerings, the Management Institute, the BCC Police Academy, and other programs.

CORPORATE SERVICE

The Corporate Service Program at Broome Community College is designed to demonstrate the College's commitment to local economic development. The Program's principle mission is to produce quality education and training programs for area business and industry. These programs may include both credit and non-credit offerings.

Course offerings in areas such as assessment of work force training needs, basic skills instruction, customized training, certificate programs, human resource management, wellness programs, educational counseling, and outplacement services can be accessed by area companies. Class schedules can be flexibly scheduled around the shift schedules of the company. Courses could be held on our campus or at the company worksite.

For additional information on contract education and training programs, call the Corporate Service Program in the Center for Community Education at 778-5000 ext. 5056.

CONFERENCES AND SEMINARS

The College conducts conferences and seminars on a variety of topics throughout the year. These are intended to update job skills and explore new fields of interest. Some of the seminars have been for law enforcement personnel, women seeking jobs and educational information, community agencies, and business and industry employees.

LEISURE TIME MINI COURSES

These are short term courses designed to explore a variety of personal interests. Programs include a hobby and craft center, personal development courses, financial courses, defensive driving, languages, and a variety of special events.

ACADEMIC POLICIES

THE ASSOCIATE IN APPLIED SCIENCE DEGREE (AAS)

This degree is awarded to graduates of curriculums in these fields of study.

Accounting
Chemical Engineering Technology
Early Childhood
Civil Engineering Technology
Computer Information Systems
Computer Technology
Criminal Justice
Dental Hygiene
Electrical Engineering Technology
Executive Secretarial
Fire Protection Technology
Hotel/Restaurant Management
Individual Studies
Industrial Technology
Marketing/Management
Mechanical Engineering Technology
Medical Assistant
Medical Laboratory Technology
***Medical Record Technology**
Nursing - Undergraduate
Paralegal Studies
***Physical Therapist Assistant**
***Radiologic Technology**
Travel & Tourism
Word Processing

Curriculum Requirements

a. The minimum number of credits in a student's major field as determined by each academic department. These are courses intrinsic to and required by the various curriculums.
b. A minimum of 20 credits in Liberal Arts and Sciences courses will include:
 1) Social Sciences: a minimum of 6 credits including 3 in designated citizenship-related courses
 2) Natural and Physical Sciences (including mathematics): a minimum of 6 credits
 3) Humanities: a minimum of 6 credits in designated English courses
 4) Two writing emphasis "W" courses
 5) Satisfaction of General Education requirements. See page 25.
c. Satisfactory completion of all courses in a curriculum or as approved in a department.
*d. Summer clinical experience required for graduation in curricula noted.

THE ASSOCIATE IN ARTS DEGREE (AA)

This degree is awarded to graduates in the Liberal and General Studies curriculum.

Liberal and General Studies requirements are distributed as follows:

a. English: 12 credits, including ENG 110, 220, and two LIT electives.
b. History: a minimum of 6 credits including HIS 115.
c. Humanities: a minimum of 6 credits (6 in Philosophy or 6 in a foreign language).
d. Mathematics: Students who have completed fewer than 3 units of secondary school mathematics (through 11th year math) are required to take two semesters of college level mathematics. Students who have completed 3 units of secondary school mathematics (through 11th year math) are required to take one semester of college level mathematics. Students who have completed more than 3 units of secondary school mathematics (including 11th year math) are not required to take additional mathematics. They may, however, elect an appropriate math course or an elective in another field.
e. Natural and Physical Sciences: a minimum of 8 credits.
f. Social Sciences: a minimum of 6 credits including 3 in designated citizenship courses.
g. Electives: 16 credits minimum. A maximum of 16 credits may be taken outside the offerings in Liberal and General Studies with the approval of the dean of the division.
h. Completion of two writing emphasis "W" courses.
i. Physical Education: 2 credits.
j. Satisfactory completion of all courses in a curriculum or as approved in a department.

DEGREE REQUIREMENTS FOR ALL STUDENTS

1. Successful completion of all courses for the degree as contained in this Catalog.
2. A 2.00 Cumulative GRADE POINT AVERAGE in those courses applicable to the degree.
3. Filing of an Application for Graduation in the final semester.
4. Recommendation of the faculty for the awarding of the degree.
5. Satisfaction of all obligations to the College.
*6. Specific Curriculum Requirements.
7. Satisfaction of General Education Requirements (see page 25).

THE ASSOCIATE IN SCIENCE DEGREE (AS)

This degree is awarded to graduates of the Business Administration, Computer Science and Engineering Science programs and to Individual Studies, Communications and Media Arts, Mental Health, and Science Option graduates in Liberal and General Studies.

A.S. Curriculum Requirements:

a. At least 30 credits in the humanities, natural sciences, mathematics, and social sciences.
b. Physical Education — 2 credits (for Business Administration, Liberal Arts, Special Careers, Computer Science and Engineering Science students only).
c. Two writing emphasis "W" courses.
d. Satisfaction of General Education requirements.



As part of its commitment to provide every graduate with the skills and knowledge essential for a full and productive life, Broome Community College has developed an integrated program of general education for every course of study. General Education's aims are to acquaint students with the concerns and obligations common to all citizens of a democratic society, and to equip them with the intellectual skills and dispositions to participate effectively in all aspects of human endeavor.

Broome Community College's General Education program strives to ensure that each graduate will:

1. Communicate effectively orally and in writing.
2. Think clearly and critically.
3. Become sensitive to the ethical dilemmas of daily life and experienced in moral reasoning, discourse, and judgment.
4. Embrace one's civic obligation to be informed about and participate in public affairs.
5. Acquire a global outlook and appreciation of human and cultural diversity.
6. Gain facility in quantitative analysis, and acquire knowledge of scientific and technological concepts, procedures, achievements and concerns.
7. Understand and apply the elements of good health and physical fitness.

These goals are pursued in a variety of contexts: in courses which all students are required to take such as ENG 110 and writing emphasis ("W") courses, in a range of social science and humanities courses, in mathematics and science courses, and in technical courses in business, health sciences, and technology.

Listed below are the specific General Education requirements with the seven objectives preceding shown in parentheses and in priority order.

- English 110(Objectives 1,2)
- English 220†(Objectives 1,3,2)
- Two writing emphasis "W" courses(Objectives 1,2)
- Two Social Science courses. **One** of these must be from a designated "civic education" list*.....(Objectives 4,5,2,3)
- Mathematics and science courses per curriculum requirements.....(Objectives 6,2,4)
- Physical education requirements per curriculum‡.....(Objective 7)

† Engineering Technology students take ENG 150. Medical Laboratory Technology students will substitute a designated LIT course for ENG 220 and fulfill writing requirements through special arrangements.

* ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130

‡ Students in transfer curricula must select at least 1 of their 2 PED credits from: PED 118, 119, 127, 135, 137, 143, 144, 146, 147, 148, 173.

These General Education requirements are built into the degree programs which are displayed on pages 37-84. However, students are responsible for making sure that they have met General Education requirements for the AA, AS, and AAS degrees. For further information students should seek assistance from their advisor and/or chairperson and dean.

WRITING EMPHASIS "W" COURSES

Approximately fifty (50) courses have been designated "writing emphasis" ("W") offerings. In these courses writing about the subject matter being studied is an integral part both of the learning process and the course objectives. To fulfill General Education requirements, students must complete 2 writing emphasis ("W") courses. These "W" courses are to be taken after completing ENG 110 and before enrolling in ENG 220. Students should consult the Master Schedule at each registration period, as well as their advisors, in choosing "W" courses.

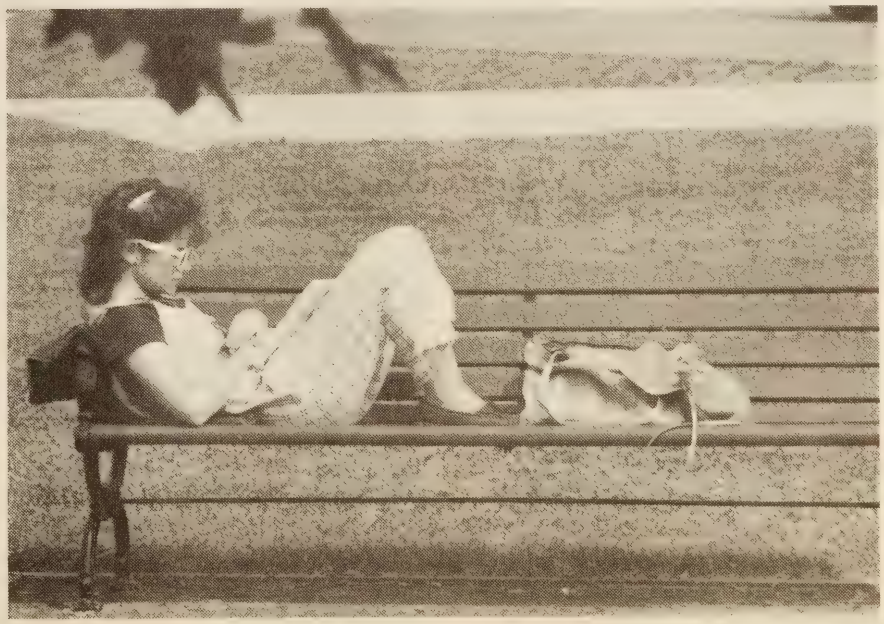
CREDIT EQUIVALENT

Some courses at Broome Community College carry "credit equivalents." This means that they do not give a student credit toward a degree at the College, but they are equivalent to the appropriate number of credits for one's academic load. This credit load is used, to cite some examples, for determining a student's status as full-time or part-time, for financial aid, for billing, and for academic standing. Courses carrying these credit equivalents fall in the 090 numbering series. Examples are: ENG 090 Basic Language Skills; MAT 090 Arithmetic and the Language of Algebra; RDG 090 Reading Fundamentals; RDG 092 College Preparatory Reading. (See Developmental Courses on page 20.)

INDEPENDENT STUDY

Many academic departments of the College offer "Independent Study" courses which are arranged between an individual faculty member and a motivated student. The student has the responsibility to make appropriate arrangements with a faculty mentor and to secure the permission of the department chairperson before registering for independent study.

A student may not take more than one Independent Study course per semester. Independent Study courses are not intended to replace regular courses which the student was unable to schedule or which he/she did not complete. Rather, these courses provide an opportunity for the serious student who desires to expand his academic background beyond the scope and the depth usually found in a regular course. (See course description section for offerings.)



POLICY OF STANDARDS FOR ACADEMIC PROGRESS

In order to be in good academic standing and to be making academic progress toward a degree or certificate, a student must meet a minimum cumulative grade point average and successfully accumulate credits according to the following standards.

1) GRADE POINT AVERAGE

Credits Attempted	Minimum Cumulative GPA
0-20	1.50
21-40	1.75
41-upward	2.00

2) SUCCESSFUL ACCUMULATION OF CREDITS

Students must successfully pass ("D" grade or better) a total number of credits according to the following standard:

Credits Attempted	Credits Completed
20	12
40	24
60	36
80	48
100	60

By the time a student has attempted 20 credits, he/she must have successfully completed 12 credits. Likewise, 40 credits trigger the 24 credit minimum requirement.

PROBATION

Students records will be reviewed at the end of each semester. Students who have not met the minimum standards will be placed on probation. A student will have one semester to achieve the minimum standards before facing dismissal. During this probationary time, the student is expected to remain in contact with his/her advisor, department chairperson or division dean.

CONTINUED PROBATION: If a student achieves a 2.00 semester grade point average but fails to satisfy the accumulation of credits requirement and/or meet the required cumulative GPA, he/she will be given an additional semester of probation. Probation will continue as long as the student continues to achieve a semester grade point average of at least 2.00.

DISMISSAL: If a student does not meet the minimum standards during the probationary semester, the student will be dismissed from the College after the probationary semester.

ATTENDANCE AFTER DISMISSAL: To continue in attendance, a dismissed student must submit a *Petition for Academic Reinstatement* to his or her Divisional Dean. Petitions can be obtained from the Dean's Office. Based on a review of the student's academic record and discussions with the student, the Dean will determine the student's status as follows:

(1) WAIVE DISMISSAL: Verified medical, psychological or personal reasons directly contributing to the student's academic failure may be considered by the Divisional Dean for a waiver of dismissal. In addition, the Dean may reinstate students at his/her discretion based on recent dramatic improvements in performance which still leave a student with cumulative credit or GPA deficiencies.

A student may receive only one waiver of dismissal during his/her enrollment at the College for the above reasons. The student will remain on probation after receiving a waiver and will be expected to obtain a 2.0 semester grade point average.

(2) PART-TIME ENROLLMENT: If a student cannot present sufficient information to be granted a one-time waiver, they may continue in the next semester on a part-time basis if approved by the Dean. Although allowed to continue in his/her program, the student is not in good academic standing and may not qualify for financial aid assistance.

The intent of allowing such part-time enrollment in an approved course of study is to allow the student the opportunity to complete a successful semester. The student will remain on probation and will be expected to obtain a 2.0 semester grade point average. Financial Aid will not be reinstated until the student attains good academic standing.

(3) DENIAL OF PETITION/LEAVE OF ABSENCE AND READMISSION: The Divisional Dean may deny the student's petition and recommend that the student refrain from registering for one or more academic terms. If the Petition for Reinstatement is denied, the student may not attend as a matriculated student.

RETURN TO FULL-TIME STATUS OR GOOD ACADEMIC STANDING: Students permitted to attend on a part-time basis may return to probationary standing by completing two courses (5 to 9 credit hours and/or credit equivalents) and obtaining a "C" grade or better in *all courses taken*. The part-time student who successfully achieves the "C" grades in those courses approved by the Dean will be allowed to return to full-time status in the subsequent semester. The student will, however, remain on probation until the cumulative GPA and credit accumulation standards have been met. Financial Aid will not be reinstated until the student attains good academic standing.

Students returning from a leave of absence from the College must reapply for admission. They are returning on a probationary status and coursework must be approved by the Department Chair. These students need not petition for reinstatement in their returning semester, but must obtain a 2.0 semester average to retain their academic standing. Students who have not taken any coursework in a consecutive 12 month period (one full academic year) may return in a probationary status and obtain financial aid assistance on a one-time basis.

DISMISSAL, READMITTANCE FOR DEGREE PROGRAMS

This policy applies to the following 10 programs — Dental Hygiene, Engineering Science, Medical Assisting, Medical Laboratory Technology, Nursing, the Office Technologies curriculums of Executive Secretary, Office Services Assistant, Word Processing and Office Technologies Certificate, and Radiologic Technology.

A student must demonstrate discernable progress toward the achievement of a degree in a given program of study. If a student fails one or more introductory courses in a major sequence, as determined by the department, he/she may be dismissed by the department from that program of study — but not necessarily from the College.

To be considered for readmission to the program the student must meet with the appropriate Department Chairperson who will make the determination. Students must also meet with a counselor so that a program of assistance may be established by the counselor. In the case of programs that have limited space for freshmen, the Admissions Office shall notify the student of his/her readmittance into the program and adjust accordingly the number of spaces available for new freshmen. A maximum of 10% of the total number of available spaces for freshmen in a program may be used for readmitted students.

ATTENDANCE REGULATIONS

Colleges throughout the nation have found that students who regularly attend classes have a better success record than students who do not regularly attend classes. With the intent of encouraging student success, BCC strongly urges students to regularly attend their classes. In fact, the College's policy is that a student is expected to come to all class sessions prepared to participate in an appropriate manner. Absence from class is considered a serious matter and never excuses a student from classwork. A student must complete all assignments, examinations, and other requirements of any course to receive credit.

The College understands, however, that students sometimes through uncontrollable circumstances, are absent from classes. In these cases, the students need to meet with their instructors to discuss missed work.

SPECIFIC RESPONSIBILITIES

STUDENT RESPONSIBILITY: Class attendance is a measurable commitment by the student toward meeting individual responsibility for his/her own education. Should a student miss a class, it is the student's responsibility to make up any work regardless of reason for absence. Students should work with the instructor and/or the Counseling and Student Development Center to help resolve reasons for absences.

Instructor Responsibility: Each instructor is responsible for relating the significance of attendance to the course objectives and to inform the students of this significance in the first class meeting. When absences occur, instructors are encouraged to discuss reasons with the student. If the reasons are beyond the student's control, instructors are encouraged to discuss with the student ways to solve the problem, including referral to the Counseling and Student Development Center.

Department Responsibility: Within the spirit and framework of College policy, each department may develop its own guidelines to meet its needs. Such guidelines are subject to the approval of the Vice-President for Academic Affairs. NOTE: Some developmental courses have strict attendance requirements, whereby students may be deregistered from the class for poor attendance. This deregistration may result in a loss of financial aid. The consequences of this may necessitate that the student return financial aid monies to the College. Consult course outline and/or instructor for further details.

DEREGISTRATION FOR NON-ATTENDANCE

The College reserves the right to administratively deregister a student for a course(s) based on lack of attendance as reported by the instructor of the course on the Official Section Attendance Sheet. Students who have never attended the section or have not attended after the census date (first day of the fourth week of classes for full-term courses) will be deregistered from the course by the Registrar's Office and notified of this action which may result in a loss of financial aid.

ACADEMIC REGULATIONS

GRADING INFORMATION

The grading policy described below has been adopted by the College commencing with the Fall 1992 semester. Grades earned by students at the College prior to that date will remain as recorded. (From Fall 1979 through Summer 1992 the College utilized a grading system of A, B, C, D, and F excluding plus or minus grades on a 4.0 quality point scale.)

Grades	Honor Points Per	Explanation
A	4.0	Outstanding achievement of course objectives
A–	3.7	
B+	3.3	
B	3.0	Significant Achievement
B–	2.7	
C+	2.3	
C	2.0	Satisfactory Achievement
C–	1.7	
D	1.0	Minimal Satisfactory Achievement
F	0.0	Failure to meet course objectives or dropped after 10th week
S	—	Satisfactory
U	—	Unsatisfactory
W	—	Withdrawn from a course between the 5th and 10th weeks inclusive (See "W" Grade below)
I	—	Incomplete due to special circumstances (See "I" Grade)
IP	—	"In Progress"-for courses in which student is permitted more than one semester to complete
AU	—	Audit
T	—	Transfer credit from an accredited college

"S" "U" AND "IP" GRADES

The S or U grade and IP grade will apply only to specific courses determined by the appropriate departments and approved by the Vice-President for Academic Affairs. Such courses will not affect the Grade Point Average (GPA) and may not be used in the determination of honors.

"W" GRADE

It is the student's responsibility to initiate action to receive a grade of W between the 5th and 10th weeks inclusive. If no action is taken before the 11th week and the course is dropped, an F (or U) will be entered on the transcript. For less than full semester courses, a proportional time to withdraw with a "W" grade will be determined. For example, 7½ week courses, an F (or U) will be entered on the transcript if the course is dropped after the 5th week. For 5-week modules an F (or U) will be entered on the transcript if the module is dropped after the 17th class. Students who withdraw from a class may not continue to attend that class.

"I" INCOMPLETE GRADE

A student who receives an "I" grade shall, within two weeks after the last class of that semester, contact his or her instructor to arrange for completion of unfinished work, in accordance with agreed upon time limits that are not to exceed one year. The instructor will then notify the Registrar of the arrangements and after the student has completed the work, of the subsequent grade to be assigned. If the student does not meet the time limit, the instructor shall direct the Registrar to record the appropriate grade.

If the student does not contact the instructor during the two-week period at the end of the semester, the Registrar shall record the appropriate grade as directed by the instructor.

IN PROGRESS GRADES

Developmental Courses allow the assignment of an "IP" or In Progress grade when the course may require more than one semester to repeat. The student must re-register for the course. When the course is completed, the student will receive the grade assigned (generally an "S" or "U" in the last semester and the prior "IP" grades will be retained).

If the "IP" is not completed (the student does not re-register or leaves the institution), the former "IP" grade will be changed to a "U" at the beginning of the first semester (Spring or Fall only) in which the student has not re-registered for the course.

A student can receive the grade of "IP" only four times for a given course. Students should note, however, that constant repetition of developmental courses may endanger their receipt of aid from the New York State Tuition Assistance Program (TAP) and other forms of financial aid.

AUDIT

The term "Audit" shall not be considered a grade but an "opportunity." For persons auditing a course, the letters "AU" will appear next to the course name on the transcript with a message statement explaining the meaning of the designation.

Students are encouraged to use the option of taking courses on an audit basis. A student may not receive credit for it later, unless he/she re-registers in the course or challenges it according to the existing rules for credit-by examination.

Students who register in a course for audit are expected to have the necessary prerequisites. In this respect students are encouraged to make full use of the College's counseling services, but the ultimate decision whether or not to enroll for audit shall be the student's responsibility.

Consideration may be given to a student's request for transfer from credit to audit status or vice versa. The end of the third week of classes is the deadline for such transfer.

Full-time students may audit courses with no additional charge, but they need approval of their department chairperson. For part-time students, the regular tuition schedule applies (see page 10). New York State residents who are 60 years of age or older may audit courses without charge on a space available basis.

REPEATING COURSES

If a course is repeated, the higher grade will enter the cumulative grade point average. If a required course is failed, the department or the dean may allow the student to substitute an equivalent or similar course, rather than repeat the failed course. In such cases the higher grade will enter the cumulative grade point average. All grades will appear on student's transcript.

Students repeating a course they have already passed (a "D" grade or better) should be aware that they may not be able to use that course as part of their calculation for full-time status for certification under the New York State Tuition Assistance Program (TAP). Students receiving TAP who will be repeating a passed prior course should check with the Office of the Registrar before the semester begins.

GRADE POINT AVERAGE

Each grade carries a specified number of honor points — 4.0 for an A, 3.7 for an A–, 3.3 for a B+ — as described in the section on Grading Information. To determine one's grade point average, multiply the number of honor points earned, according to the letter grade, by the number of credits for the course. Add these together and divide the sum by the total number of credits.

A grade point average (GPA) is calculated for each semester the student attends and a cumulative summary is also shown on the student's grade report and academic transcript.

For purposes of graduation eligibility, only those courses required for the degree will be used to determine if the criteria for a *2.0 in courses applicable to the degree* has been met. This calculation will reflect the Program grade point average in the student's field of study and will be fixed as of graduation. Any courses taken after that will not change the graduation GPA and will not be entered into the previous GPA in any way. The cumulative GPA, however, will reflect all courses taken by the student unless a course has been repeated or removed from the calculation by a Department Chair and/or advisor.

SEMESTER CREDIT OVERLOAD

During the Fall and Spring semesters a student may not enroll (register) for more than 20.5 credits without approval from their Divisional Dean.

During the Summer semester, a student may not register for more than 6.0 credits in any one summer term or take more than 12.0 credits for all summer terms without permission from their Divisional Dean.

PRESIDENT'S LIST AND DEAN'S LIST

Full-time students who have a semester grade point average 3.80 or better will be named to the President's List. Such students must successfully complete a minimum of 12 credit hours. ***Courses which use the S or U or credit equivalent grade may not be among the 12 hours.***

Full-time students who have a semester grade point average between 3.50 and 3.79 inclusive will be named to the Dean's List. Such students must successfully complete a minimum of 12 credit hours. ***Courses which use the S or U or credit equivalent grade may not be among the 12 hours.***

Part-time students can earn a place on the President's or Dean's List by having the appropriate cumulative grade point average for their most recent semester that include at least 12 credit hours. ***Courses which use the S or U credit equivalent grade may not be among the 12 hours.*** Part-time students should contact the Registrar's Office if they have the appropriate grades.

GRADUATION WITH HIGH HONORS OR HONORS

Students who graduate with a program grade point average of 3.80 or better will receive the distinction of graduating with "High Honors" and those who graduate with a program grade point average between 3.50 and 3.79 inclusive will graduate with "Honors."

STUDENT CHEATING

An instructor has the prerogative of failing a student who has cheated on an exam, quiz, paper, project, report, etc. for that exercise only. Students who cheat a second time risk failure for the entire course and additional disciplinary action, including the possibility of dismissal from college.

STUDENT ACADEMIC APPEAL PROCEDURE

Broome Community College has established a procedure to provide students an opportunity to appeal grades in any particular course(s) or academic dismissal. Copies of the Student Academic Appeal procedure are available in the offices of the Divisional Deans, and the policy also appears in the Student Handbook.

WITHDRAWAL FROM THE COLLEGE

Broome Community College has committed itself to a philosophy of providing whatever assistance is necessary to aid the student in completing his/her academic goals. Students are strongly encouraged to seek academic and personal counseling prior to any withdrawal.

Students who decide to withdraw from the College must obtain a signed drop form from their department and complete a withdrawal form. The withdrawal form is available in the Counseling Center. Failure to comply may cause the individual to lose any possible refund fees.

LENGTH OF CURRICULUM

Most associate degree programs are designed to be completed in two years. The college year is divided into two semesters of 15 weeks each plus an evaluation week. Some students may choose or be required to take more than four semesters to earn their degrees. Radiologic Technology students, for example, have special clinical laboratory experiences in the summer of both their freshman and senior years.

LATE REGISTRATION POLICY

Late registration for credit courses will be permitted through the Friday of the first week of classes (each semester/summer term). To be registered is distinct from changing a student's course schedule through the drop/add process.

WITHHOLDING OF GRADES AND DIPLOMAS

Student's Official College Transcript and diploma will be withheld if there are outstanding financial or property-returning obligations. These could be to such College offices as Security, Learning Resource Center (Library), Student Accounts, Physical Education, as well as others. Students must settle any such outstanding debts to the College and then present evidence of the settlement to the Office of the Registrar.

DECLARATION OF GRADUATION CANDIDACY

Students intending to complete all degree requirements within a given semester are required to declare their intention to do so by filing an "Application for Graduation" with the Office of the Registrar. Students who have previously indicated their plans to complete in a specific semester will be mailed the Application form at the beginning of each semester.

Applications for Graduation should be filed by:

Spring Semester — March 15th
Summer Semester — July 15th
Fall Semester — October 15th

Students filing after these dates will be considered as graduates for the semester but may not receive their diploma in a timely fashion or have their name indicated in the Commencement Booklet (Spring semester). No application for candidacy will be accepted after the last day of classes of the term being applied for. Students applying after that date will be considered as a graduate of the following semester.

GRADUATION

Broome Community College will conduct one formal graduation ceremony each year in the spring. All candidates for degrees may participate in the ceremony. A candidate is a student who will complete his/her degree requirements at the conclusion of the spring or summer semester. Candidates must have filed their "Application to Graduate" and have been recommended as candidates by the chairperson of their academic department. Students who complete their degree requirements at the end of the fall semester will be invited to attend the next graduation ceremony.

ABSENCE DUE TO RELIGIOUS BELIEFS

Section 224-a of the State Education Law reads:

1. No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he is unable, because of his religious beliefs, to attend classes or to participate in any examination, study or work requirements on a particular day or days.

2. Any student in an institution of higher education who is unable, because of his religious beliefs, to attend classes on a particular day or days, be excused from any examination or any study or work requirements.

3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school, because of his religious beliefs, an equivalent opportunity to make up any examination, study or work requirements which he may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.

4. If classes, examination, study or work requirements are held on Friday after 4 p.m. or on Saturday, similar or makeup classes, examinations, study or work requirements shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study or work requirements held on other days.

5. In effectuating the provisions of the section, it shall be the duty of the faculty and of the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of his availing himself of the provisions of this section.

6. Any student, who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section, shall be entitled to maintain an action or proceeding in the supreme court of the county in which such institution of higher education is located for the enforcement of his rights under this section.

6-a. A copy of this section shall be published by each institution of higher education in the catalog of such institution containing the listing of available courses.

7. As used in this section, the term "institution of higher education" shall mean schools under the control of the Board of Trustees of the State University of New York or of the Board of Higher Education of the City of New York or any community college.

RETENTION

The College has been conducting an ongoing study to determine how many of its students eventually graduate either from Broome or other colleges to which they transfer.

Early indications show that the number of students completing academic programs at Broome is steadily rising. In recent years, the graduation rate is estimated to have exceeded 50%, covering all programs. In some fields, especially the engineering technologies, the graduation rate appears to be greater, reaching as high as 65% to 70% of the entering class.

Another survey of students receiving financial aid was completed in Spring 1984 with 65% of students graduating from all programs.

EDUCATIONAL RIGHTS AND PRIVACY ACT (BUCKLEY AMENDMENT)

The Family Educational Rights and Privacy Act of 1974, as amended, establishes specific rights for students and/or their parents and prevents the release of certain information without the written consent of the student. Generally, this federal law gives students, former students, and alumni the right to review, in the presence of college personnel, their own personal records maintained by the college, including academic and financial records.

Parents of dependent students, as defined by the Internal Revenue Service, may have access to the college records of their dependent sons or daughters without student consent. Parents do not have the right to see records of children who are no longer dependent upon them.

At Broome Community College the repository for student records is the Office of the Registrar (Wales 206). This office is open weekdays from 9:00 a.m. to 5:00 p.m.

In keeping with the spirit of Section 438 of the Act, the Registrar has been appointed as Records Access Officer. The following procedures have been developed for the benefit of the student and eligible parent:

1. a. A student in attendance at Broome Community College shall, upon written application, be able to view his/her educational records at the Office of the Registrar within 45 days of the date of said application. This application is available in the Office of the Registrar.
 b. A parent or guardian of a student in attendance at Broome Community College, who claims a student as a dependent on his/her Federal Income Tax Form shall, upon proper presentation of the dependency condition, be afforded the same rights as set forth in Paragraph 1a.
2. Access to personally identifiable information about a student without the consent of the student may be provided by the College to the following individuals or agencies only:
 a. School officials and professional employees of Broome Community College who have a legitimate educational interest.
 b. School officials of educational institutions to which a student might transfer.
 c. Authorized state and federal government officials of educational and funding agencies.
 d. Educational research agencies, with the provision that they release only non-personally identifiable data.
 e. Accrediting organizations.
3. Disclosure Without Approval of Student or Eligible Parent:
 a. Upon receipt of a Judicial Subpoena of the records of a student, a reasonable attempt will be made to notify the student or the parent of the existence of the order of the subpoena in advance compliance therewith.
 b. In the event of an emergency involving the health or safety of a student, the Registrar may disclose information to Federal or State Officials.
 c. Directory Information — The name of the student and dates of attendance and dates of graduation will constitute the total amount of information given to any individual making inquiry at Broome Community College, ***unless the student or eligible parent refuses to permit the disclosure. The student or eligible parent must submit, within 30 days of this publication to the Registrar that such personally identifiable information is not to be designated as directory information with respect to that student.***
4. Broome Community College shall, on request, provide an opportunity for a hearing in order to challenge the content of a student's education records to insure that information in the education records of the student is not inaccurate, misleading, or otherwise in violation of the rights of privacy or other rights of students. The request for a hearing will be directed to the Registrar.

STUDENT SERVICES

The Student Affairs Division at Broome Community College has three primary areas of responsibility — student development, student services, and student management.

Student Development responsibilities include counseling, international student affairs, academic advisement, testing, freshman orientation, student activities, intercollegiate athletics, drug abuse education, leadership training, career development, veterans' advisement, personal development courses, and transfer advisement.

Student Services covers admissions, financial aid, placement and health services.

Student Management concerns itself with student discipline, rights, responsibilities, judicial system and grievance procedures.

A comprehensive statement outlining the College's code of student conduct and student rights and responsibilities is available in the office of the Vice President for Student Affairs in Room 202 of the Wales Building. Students are welcome to examine it.

EDUCATIONAL OPPORTUNITY PROGRAM (EOP)

The Educational Opportunity Program (E.O.P.), administered by the State University of New York and Broome Community College, is an academic and financial support program designed to provide assistance to students who have not had an opportunity to realize their academic potential.

To help students successfully complete college, E.O.P. provides tutoring, personal and academic counseling, success seminars and some financial assistance to help defray the cost of college.

All potential E.O.P. students must:

a. Act on the desire to be in the E.O.P. by contacting the E.O.P. office.
b. Qualify by meeting financial, as well as academic, guidelines.
c. Be accepted into the E.O.P. by applying and providing appropriate documentation before the end of their first semester of college.

For further information, contact the E.O.P. office in the Athletic Suite-Student Center West (778-5000 ext. 5220).

PACE

The BCC PACE (Public Assistance Comprehensive Employment) Program is a cooperative effort between The Department of Social Services and Broome Community College. It is geared specifically to help men and women with dependent children who are receiving public assistance and wish to return to school for vocational education.

We help students cope with the responsibilities of being both a parent and a student, plus help coordinate child care and transportation needs. Those interested in this program may contact BCC PACE Program, Room 213 in the Student Affairs Building or call 778-5000 ext. 5350.

LIVING ACCOMMODATIONS

The College has no dormitory facility and assumes no responsibility for student housing. As a service to students the Student Activities Office maintains an up-to-date record of housing accommodations which landlords submit as being available. Copies of the housing list may be obtained by contacting the secretary in the Student Activities office located in the Student Union. The listing is neither an approval nor rating by the College, nor will the College become a third party in any arbitration between students and landlords. Housing arrangements must be made directly by students and parents with local landlords.

HEALTH AND WELLNESS RESOURCE CENTER

The College provides a Health Service which is available to all students at no additional charge for services rendered on campus.

Professional staff includes a part-time physician, clinic nurse, and health educator; clinic nurse is available during regularly scheduled classes in the fall and spring semester.

The Health and Wellness Resource Center is located in the Wales Administration Building, Room 103, and is open 8:00 a.m. to 5:00 p.m., Monday through Friday. All records are confidential, and information will be released only with the written authorization of the student.

SERVICES:

- Ambulatory services for treatment of illnesses and injuries.
- Limited urgent care.
- Blood pressure and vision checks.
- Pap tests by appointment.
- Tests for pregnancy, strep throat, diabetes, and urinary infections.
- Referrals to local physicians, specialists, clinics and hospitals.
- Allergy injections — medication to be supplied by student and given when the physician is on campus.
- Tetanus and PPD-Mantoux injections.
- Education on diet, nutrition, fitness and weight management.
- Health and wellness programming.
- Insurance — Processing of accident insurance claims, as well as information regarding international student health insurance and optional sickness plan.
- Health counseling and assistance with personal and health problems with appropriate referrals within the college community.
- Immunization (measles, mumps, and rubella) certification.

COUNSELING AND STUDENT DEVELOPMENT CENTER

The Counseling and Student Development Center provides many services for students, whether they are enrolled full-time or part-time, day or evening. Specialized counseling is also available for the international, disabled, career undecided and academically dismissed students. All students can meet with counselors in a helpful and informal atmosphere as they seek to develop their potential, form realistic goals, and understand themselves emotionally and intellectually. The Center is equipped to help students:

1. Understand their basic needs in terms of social, vocational and emotional adjustment to the college setting.
2. Establish realistic educational goals and appropriate methods of achieving them.
3. Assess their strengths and weaknesses to enable them to more effectively deal with academic and personal problems.
4. Better understand their role and that of the College in the higher educational process.
5. Obtain information about transfer and career opportunities, as well as assistance with academic problems.
6. Grow in their personal development and determine appropriate values through instruction in human development courses.

The Counseling and Student Development Center, located on the second floor of the Wales Building is staffed by professional counselors. The Center is open from 8 a.m. to 8 p.m., Monday through Thursday, and 8 a.m. to 5 p.m. Friday during the academic year. Students should become acquainted with the Center by stopping in at their convenience or calling 778-5000 ext. 5210 for an appointment. A special brochure is available at the Center giving details about the service.

CAREER AND LIFE PLANNING

Broome Community College offers an opportunity for students to explore interests, strengths and values in both an individual and group setting. Knowing as much as possible about oneself is the first step in understanding goals related to self fulfillment and to the world of work. The Counseling and Student Development Center can help in the process of self-evaluation and has information on career possibilities, audio-visual aids, testing procedures and techniques used in the process of exploring career fields and making career decisions. Counselors work closely with the College's Placement Center staff in offering students a comprehensive approach to career planning.

PERSONAL COUNSELING

Counseling is available for students experiencing social, personal and family concerns. Counselors attempt to help students face problems with an holistic approach.

Counselors are available to discuss problems with drugs, alcohol, school, family, career education, transfer and personal concerns.

Assistance is given in both direct and indirect ways, by exploring, understanding and dealing with tasks and crises related to the problems being experienced. Counselors may make referrals to appropriate community agencies, if that should be necessary and mutually agreeable. All counseling is strictly confidential.

ACADEMIC COUNSELING

Counselors are available to help students put their academic efforts into the proper perspective by analyzing their study, social and work habits to enable them to utilize their time in the most efficient way.

TESTING

In conjunction with career and life planning, personal counseling, and academic counseling, the Counseling and Student Development Center offers students the opportunity to engage in a testing program. When appropriate, it can be arranged for a student to take a variety of tests including personality and interest inventories. Cognitive style mapping is also available to help students better understand their individual learning preferences. The test can help students develop self awareness and improve their decision-making ability. The Counseling Center also administers the ACT test and other professional career tests and licensing examinations.

HUMAN DEVELOPMENT COURSES

Courses are offered which provide students with an opportunity to examine their values, attitudes, beliefs and abilities. The courses also offer an opportunity to learn how these factors affect the quality of relationships with others. In addition, the students examine the challenge and problems of society as they relate to their development. The Career Exploration, Human Potential, and Individual in a Changing Environment is usually transferable for credit.

ORIENTATION PROGRAM

The college-wide orientation program, the Counseling and Student Development Center takes an active role in providing a comprehensive orientation program for the freshman, transfer and readmitted students. Sessions involving familiarization with the campus and the services available and discussion regarding adjustment to college life are coupled with social and cultural activities to make for a meaningful orientation. Orientation takes place prior to and during acceptance into the College and all information concerning the activities will be mailed to all students prior to the beginning of the semester.

The staff of the Counseling Center together with the entire division of Student Affairs endorses the concept that a community college environment should facilitate the development of the whole student.

SPECIAL WORKSHOPS AND SEMINARS

The Center offers a variety of workshops and seminars throughout the college year. Those that have been offered cover such topics as relaxation techniques, career exploration, cognitive style mapping, returning to college, assertiveness training, eating disorders and substance abuse.

PROGRAM FOR PEOPLE OVER 60

Any citizen of New York State who is 60 years of age or more may "audit" courses at Broome Community College without charge, as long as there is space available. In this connection the word "audit" means these students take the course by attending classes and being exposed to all the work given in class and assigned in the text. They do not have to do the homework or take the examinations, however, and they receive no letter grade or college credit.

COUNSELING FOR DISABLED STUDENTS

Students with disabilities may receive counseling through the Counseling and Student Development Center. A counselor is available for these students in Wales 103, which is completely accessible. All services of the Counseling and Student Development Center are available through this counselor and are confidential. To make an appointment, students should call 778-5000 ext. 5210 or 771-5185 (TTY).

For other issues related to disabilities, please call the Student Support Services Office at 778-5000 ext. 5150 (771-5234 TTY).

A TDD/TTY telephone unit is available in the Counseling and Student Development Center to make it accessible for the hearing impaired. The number is 771-5185.

VETERANS

The Counseling and Student Development Center administers and supervises the Office for Veterans Affairs. Located in the Wales Building (Room 111) the Veterans Coordinator assists veterans in their certification for benefits and in those matters related to the Veterans Administration. The Coordinator works closely with the Counseling staff in referring students requiring counseling services.

TRANSFER TO 4-YEAR COLLEGES AND UNIVERSITIES

Broome Community College has developed a fine reputation for its successful preparation of students for study at senior institutions. Students desiring to continue their education are encouraged to consult with a counselor in the Counseling and Student Development Center, their faculty advisor, department chairperson or dean for assistance in selecting a program and/or institution that is appropriate to their goals, abilities and aspirations.

To these ends, the College conducts the Transfer Emphasis Program, which consists of workshops sponsored by the Center and of visits to the campus by representatives of four-year schools to recruit and advise potential transfer students. These visits occur each semester, and they are designed to expedite the information process, necessary to ensure a smooth transition between community college and various four-year programs. The representatives, generally from admissions offices, discuss life on their campuses, financial assistance possibilities and activities available, in addition to the traditional explanations of all their academic programs.

Applications for the **State University of New York** colleges and university centers are available in the Counseling and Student Development Center. Students should apply directly to all **other colleges** (non-SUNY units) by requesting an application and any other pertinent data from the admissions office of the desired college.

All students should arrange at the BCC Registrar's Office to have copies of their transcripts forwarded to the admissions office of the colleges to which they are applying. This will ensure proper transfer of applicable credits. Any requests for references and recommendations may be forwarded to the Counseling and Student Development Center, and all acceptances and rejections of applications should also be reported to the Center.

Any questions or problems regarding transfer should also be directed to the Counseling and Student Development Center. For information on special transfer opportunities, see pages 18-19.

INTERNATIONAL STUDENTS

GENERAL INFORMATION

The College welcomes students from other countries and is authorized by the United States Department of Justice to issue the necessary Certificate of Eligibility for F-1 Student Status (Form 1-20).

The College provides an advisor to assist students from other countries in all areas of student life while at Broome Community College. The advisor also assists the student in finding housing since the College has no student dormitories. It is estimated that college costs and living expenses are approximately $10,000 per year.

ADMISSIONS REQUIREMENTS

English Language Proficiency

A. Students who submit a TOEFL score of 525 or better will be admitted to the program of their choice if they have the academic background necessary for that program. Academic program requirements are listed on page 9 of the Catalog.

B. Students who have not taken the TOEFL or who score below 525 can be admitted to the College and will be assigned a special academic advisor, if they have one of the following:
 1. A Michigan test score of 65 or a TOEFL score of 400.
 2. Successful completion of four years of English language at the secondary or college level.

C. Students who do not meet either of the English proficiency requirements above can only be admitted to the College by special arrangement and must be in "sponsored" groups of 10 or more.

Other Requirements

A. Applicants must submit the "Application for Admission" and "Applicant Information Sheet" which can be obtained by writing to the Admissions Office.

B. Applicants must submit a transcript in English (certified translation) of all secondary school and college work completed.

C. Applicants must provide an affidavit of financial support. Forms will be mailed along with application information.

D. After acceptance to the College, the student must show evidence of health coverage.

E. Applicants must submit TOEFL or Michigan test scores if either of these tests have been taken.

F. Applicants whose native language is not English, must take a special language proficiency examination at the College before they are allowed to register for classes. This test is used for English language placement. Students must enroll in English language coursework every semester until they have met the proficiency requirements of their academic program. Along with other students at the College, international students are also required to take a mathematics placement test.

STUDENT ACTIVITIES

The Student Activities Program at Broome has grown out of a conviction that education is not restricted to scheduled classes, that the hours outside of the classroom are of major importance, and that the Student Activities Program gives an additional dimension to education. This program offers a variety of social, cultural, and intellectual experiences and opportunities for the development of social growth, appreciation, and insights.

In recognizing the existence of this part of college life, the College actively supports a co-curricular activities program that is funded by the student activity fee paid each semester. The Student Activities area represents one phase of campus life in which the students can and do have a voice in management and programming. The diversity of students' interests is reflected in the many active clubs and organizations on campus. Involvement in the Student Activities Program provides students with the opportunity to develop leadership abilities.

Credit can be earned for participating in some of these co-curricular activities. Students should check with their advisors for further information concerning these credits.

STUDENT GOVERNMENT ASSOCIATION

The official organization of student representation on the Broome Community College campus is the Student Government Association. Student membership consists of five officers and thirteen senators who are elected annually. All BCC students are welcome to attend meetings and become involved with SGA committees and activities. The SGA holds regularly scheduled meetings to discuss all issues concerning students. These issues are then presented to the appropriate faculty, staff or administrative area. A Student Trustee sits on the College Board of Trustees as a voting member and presents information of student interest to this body.

Student Government Association fulfills many student responsibilities on campus. It regularly reviews College policy and makes recommendations to the College Administration. Representatives of the SGA serve on the Faculty-Student Association. The operation of the Student Government is important to students and puts students' ideas and viewpoints into action.

STUDENT CENTER

One of the busiest buildings on the Broome Community College campus is the Student Center. It houses the gymnasia, the College Cafeteria, Book Store, the Little Theater, Physical Education and Athletic Directors' offices. This building is used by day and evening students of all curricula and many campus social events are held here.

CURRICULUM AFFILIATED ORGANIZATIONS

In addition to the student organizations listed above that are affiliated with professional societies, the College has a number of associations that are identified with specific curriculums. Among these are Accounting Club, Chemistry Club, Civil Technology Association, Collegiate Secretaries International, Computer Club, Dental Hygiene Association, Medical Assistant Club, Medical Records Club, ***Fulcrum*** (newspaper), Institute of Electrical & Electronics Engineers, Society of Manufacturing Engineers, Student Nurses Association, Lively Arts from the Liberal Arts curriculum, the Student Organization of Radiologic Technologies, the Broome Early Childhood Association, the student chapter of the N.Y.S. Restaurant Association, and the Physical Therapist Assistant Club.

OTHER CLUBS

In addition to the co-curricular activities listed on this page and the next one, other organizations are active on campus. These include:

Aviation Club
Chess Club
International Students
Lambda Society
Minority Student Union
Outing Club
Phi Theta Kappa
The Adult Student Club
Ski Club
Ecology Club
S.A.D.D.

These are open to all full-time and part-time students. Details are available from the Director of Student Activities.

PERFORMING ARTS

THEATRE/BCC

Complementing the studio and academic course work in theater is the group known as Theatre/BCC. All students are invited to participate, whether or not enrolled in formal course work.

Theatre/BCC enjoys a fine artistic reputation, presenting a broad range of theatrical styles, and provides its actors/technicians with varied opportunities for ensemble as well as individual training. Theatre/BCC provides a challenging and exciting experience for students with an interest in the theater, and most of its productions are performed in the intimate setting of the College's Little Theater.

NOTE: Students may receive transferable credit for active participation in College Choir, the Instrumental Music Association and Theatre/BCC. The conditions for this credit are available from one's advisor.

MEDIA

Fulcrum (campus newspaper) offers a variety of information for the students. It speaks out on important issues, offers the humorous side of student life, and gives the students a chance to voice their opinions through editorials and human interest stories.

MUSIC

College Choir is sponsored jointly by the Liberal Arts Division and Student Government Association. Choristers have gained an excellent reputation and are exposed to a broad range of choral literature reflecting the varied demands for community concerts. The chorus traditionally produces an annual performance of Handel's "Messiah" and an annual Spring Concert, as well as performances for local church and civic organizations. Rehearsals are held weekly and all students and staff, as well as community singers, are welcome to join this very active group.

The Music Association offers students who have previously played instruments the chance to continue their involvement in small ensembles (brass, woodwind and string) and the College Stage Band. A limited program of private coaching is also available.

BCC Jazz Ensemble offers instrumentalists a chance to perform jazz and jazz-rock on campus and on tour. Its members strive for high quality performing and the enjoyment of working together toward this goal. A group of eight singers is used for popular arrangements with the band.

Improvisation, beginning and intermediate piano, beginning guitar and reading classes are available to BCC students.

PROFESSIONAL SOCIETY AFFILIATES

Since exposure to organizations in their fields of study is considered of benefit to students, many curriculums have their own affiliates of national professional societies. Among these are:

Society of Manufacturing Engineers (SME) for Mechanical Engineering Technology students.

Dental Hygiene Association, an affiliate of the American Dental Hygiene Association.

Institute of Electrical and Electronics Engineers (IEEE) for Electrical Engineering Technology students.

In addition, some meetings of local professional societies are attended by students, such as the **American Chemical Society,** which invites Chemical Engineering Technology students to its meetings. Some professional societies hold meetings on campus, too, and students are always welcome to attend. Thus students have the opportunity to become acquainted with professional people in their fields of study and to attend lectures and see films and demonstrations of new developments.



HONOR SOCIETIES

Phi Theta Kappa

In 1962, the Mu Eta Chapter of Phi Theta Kappa was established at the College. Phi Theta Kappa is a national honor society at two-year colleges, similar in purpose to Phi Beta Kappa at the four-year colleges and universities. Mu Eta Chapter is open to freshmen and seniors at Broome Community College who have achieved outstanding academic grades.

Sigma Phi Alpha

The national dental hygiene honor society, Sigma Phi Alpha, has a chapter at Broome Community College, The Upsilon Chapter. Senior Dental Hygiene students who rank highest in scholarship and who exhibit potential qualities for future growth and attainment are selected for membership.

Tau Alpha Pi

The national honor society for students in engineering technology programs, Tau Alpha Pi has established a chapter on the Broome Community College campus. It is the Beta Theta Chapter. This society recognizes academic achievement in BCC engineering technology curriculums in Electrical, Civil, Chemical and Mechanical Technology.

ATHLETICS

The Athletic Department at Broome Community College serves as an integral part of the institution's total academic and student activities program. BCC is serious about athletics. The Department strives to provide an environment through which the athlete can achieve maximum development physically and mentally, through a well-rounded schedule of intercollegiate competition in athletics.

BCC is one of 520 member schools of the National Junior College Athletic Association (NJCAA). It is also one of 32 members of the subdivision of NJCAA Region III. BCC also participates in the Mid-State Conference as well as the Junior College Hockey League.

For Intercollegiate competition Broome Community College fields men's teams in eight varsity sports — basketball, baseball, cross-country, golf, ice hockey, soccer, tennis, and wrestling. For women BCC sponsors four varsity teams — basketball, cross-country, softball, and volleyball.

BCC athletic teams have a rich tradition of success in two-year college competition. Dick Baldwin, who formerly coached Men's Basketball at BCC for 40 years, set the all-time record of 879 victories by a college coach. This achievement earned BCC national recognition in the Basketball Hall of Fame. The Golf team finished second in the Nationals in 1991 and won the Regionals in 1981, 1985, and 1991. The Soccer team finished the 1991 season with the best record in BCC history and was ranked fourth in the Region III Tournament. The baseball, men's tennis, ice hockey, and cross-country teams all have won regional and national recognition throughout the years.

The women's program has been as equally successful in regional competition. The Volleyball team has participated in the Regionals as well as the National Tournament. Cross-Country and Tennis have sent representatives to both tournaments. The Softball and Basketball programs have made great strides over the years and have contributed to the rich athletic tradition at BCC.

Cheerleading is also available for both men and women and the Athletic Department sponsors men's club LaCrosse.

The Athletic Program is enhanced by its facilities: two large, fully equipped gymnasiums, a weight room, a Dance/Combative room, athletic trainer's room, a baseball field, soccer field, and six tennis courts. A softball complex of four fields is also available to the College. BCC has recently added a fully equipped Health Fitness Center.

INTRAMURALS

Physical activity is a vital part of an individual's life, regardless of physical capability. With this in mind, the Student Affairs Division and the Physical Education Department coordinate an intramural program for all students enrolled at the College. Students are invited to participate in team sports such as Touch Football, Soccer, Hockey, Basketball, Volleyball and Softball. For those interested in individual competition or "Play for Fun" sports such as Tennis, Golf, Badminton, Horseshoes and Bowling are also offered. Students participating in intramurals should have a health questionnaire on file with the College Health Service. Forms are available in the Health Service Office (Wales Building, Room 104).

PLACEMENT

94% OF 1991 GRADUATES FOUND JOBS OR TRANSFERRED

• **94% of the 1991 Graduates** either found employment or transferred to 4-year colleges, thus enabling BCC to fulfill its two major missions of preparing graduates for immediate employment or transfer to 4-year colleges.
• 52% of the graduates went to work.
• 42% transferred to 2 and 4 year colleges or other technical programs.
• 4% were unemployed at the time of the survey.
• 2% were unavailable for work.

• **Starting Salaries** of those who went to work averaged $19,362 a year and ranged from $9,750 up to $30,000. About 36% reported salary information.

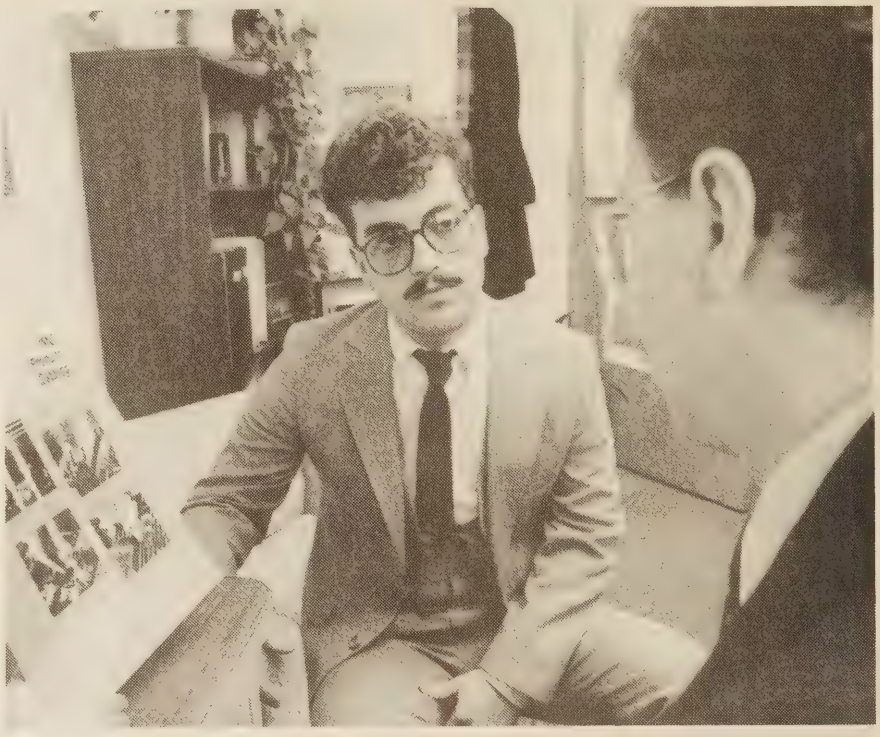
• **993 Graduates were in the Class of 1991** at Broome Community College and 92% of them responded to the survey. All statistics here are based on that 92% response.

Where They Went to Work:
• 77% of those who went to work found jobs in Broome County, with an additional 10% working elsewhere in the Southern Tier. In addition 3% got jobs elsewhere in New York State, and another 9% went outside of the state.

Where They Transferred To:
• 74% of those who are continuing their higher education transferred to colleges in the State University of New York (SUNY) system.
• 15% to private colleges in New York State.
• 12% to out-of-state colleges and universities.

Leading Employers, in order:

- Hospitals, Clinics, Rehabilitation Services, Fitness and Wellness Centers
- Large industries such as IBM, NYSEG, GE, CAE Link
- Civil Service — city, county, state and federal, including the military
- Day care, educational and non-profit organizations
- Business firms other than retail and computer services
- Retail stores
- Dentists and related specialties
- Restaurants and fast food establishments
- Banks, credit unions, financial institutions investment and insurance agencies
- Self-employed
- Law offices
- Grocery stores, seafood distributors, bakeries



Colleges to which BCC Graduates Most Frequently Transferred in 1991, in order:

SUNY at Binghamton
SUC at Cortland
SUC at Oneonta
Rochester Institute of Technology
SUNY at Buffalo
SUNY at Albany
SUC at Oswego
SUNY Institute of Technology at Utica/Rome
Clarkson University
SUC at Brockport

PLACEMENT OFFICE SERVICES

Most students who attend Broome Community College will eventually enter the job market. Getting a job, particularly that first entry level position, requires an understanding of how to contact employers and what job hunting techniques provide the best employment success. The Placement Office not only helps students locate positions, but offers assistance in resume writing and interviewing techniques. In addition to providing information through workshops, appointments can be made to discuss job market predictions, salary expectations, and other questions related to employment.

The Placement Office lists full-time positions most of which are related to academic programs at the College and which are of particular value to students wishing to gain experience in their chosen field. Listing and assistance with locating part-time and seasonal jobs is provided by a New York State Job Service employment counselor who is available in the Placement Office every afternoon. The NY State Job Service also provides a weekly national and local job bank microfiche which can be viewed daily.

The quality of the College's academic programs is well known both locally and nationally. During the spring semester of every year, representatives of business, industry and other organizations visit the campus to interview potential graduates for employment purposes. Augmenting the one-on-one recruiting interview is the opportunity to make contact with several employers during the Health Sciences Job Fair in February and the Business & Liberal Arts Job Fair in April. Students wishing information regarding these recruitment programs should contact the Placement Office.

The Placement Office is located in the Wales Building, Room 201, and is open for student use from 8:00 until 4:30 each day. Evening hours are available on an appointment basis only.

Placement Office
Wales Bldg., Room 201
(607) 778-5000 ext. 5205

PLACEMENT FOR CLASS OF 1991

THE ACADEMIC AREAS

BUSINESS — 330 graduates, 54% employed, 7% unemployed, 36% transferred, 3% unavailable for work. Salary info - $12,890 average, $9,750 to $18,345 range.

COMPUTER STUDIES — 39 graduates, 64% employed, 3% unemployed, 33% transferred, 0% unavailable for work. Salary info- $17,720 average, $13,520 to $21,840 range.

ENGINEERING & TECHNOLOGY — 126 graduates, 38% employed, 7% unemployed, 55% transferred, 0% unavailable for work. Salary info - $20,064 average, $12,480 to $30,000 range.

HEALTH SCIENCES — 155 graduates, 93% employed, 1% unemployed, 5% transferred, 1% unavailable for work. Salary info- $22,038 average, $12,480 to $29,640 range.

LIBERAL ARTS — 247 graduates, 23% employed, 1% unemployed, 73% transferred, 3% unavailable for work. Salary info- $15,254 average, $12,480 to $19,760 range.

SPECIAL CAREER PROGRAMS — 96 graduates, 62% employed, 1% unemployed, 31% transferred, 6% unavailable for work. Salary info - $13,070 average, $10,400 to $17,056 range.

CURRICULUM

Following is a summary of each curriculum of BCC's six academic areas in which there were graduates last year. Percentages are based on number of graduates responding, not total number.

BUSINESS

ACCOUNTING — 58 graduates, 64% employed, 13% unemployed, 21% transferred, 2% unavailable for work. Salary info- $14,821 average, $13,520 to $16,640 range.

BUSINESS ADMINISTRATION — 77 graduates, 27% employed, 1% unemployed, 70% transferred, 1% unavailable for work. Salary info - $12,342 average, $10,400 to $14,625 range.

ENTREPRENEURSHIP — 7 graduates, 50% employed, 33% unemployed, 17% transferred, 0% unavailable for work. Salary info - N/A

HOTEL MANAGEMENT — 6 graduates, 33% employed, 0% unemployed, 67% transferred, 0% unavailable for work. Salary info - NA.

MANAGEMENT — 22 graduates, 41% employed, 14% unemployed, 36% transferred, 9% unavailable for work. Salary info- NA.

MARKETING — 41 graduates, 38% employed, 5% unemployed, 54% transferred, 3% unavailable for work. Salary info - $12,500 average, $10,000 to $15,000 range.

MARKETING/MANAGEMENT — 49 graduates, 81% employed, 7% unemployed, 7% transferred, 5% unavailable for work. Salary info - NA.

OFFICE TECHNOLOGIES (EXECUTIVE SECRETARY) — 21 graduates, 72% employed, 6% unemployed, 17% transferred, 6% unavailable for work. Salary info- $12,146 average, $10,400 to $13,520 range.

OFFICE TECHNOLOGIES (OFFICE SERVICE ASSISTANT) — 2 graduates, 50% employed, 0% unemployed, 0% transferred, 50% unavailable for work. Salary info - NA.

OFFICE TECHNOLOGIES (WORD PROCESSING) — 20 graduates, 85% employed, 5% unemployed, 5% transferred, 5% unavailable for work. Salary info - $13,079 average, $9,750 to $18,345 range.

REAL ESTATE — 3 graduates, 50% employed, 0% unemployed, 50% transferred, 0% unavailable for work. Salary info - NA.

RESTAURANT PROGRAM — 4 graduates, 100% employed, 0% unemployed, 0% transferred, 0% unavailable for work. Salary info - NA.

RETAIL MANAGEMENT — 4 graduates, 25% employed, 0% unemployed, 75% transferred, 0% unavailable for work. Salary info - NA.

TRAVEL AND TOURISM — 16 graduates, 67% employed, 13% unemployed, 20% transferred, 0% unavailable for work. Salary info - NA.

COMPUTER STUDIES

COMPUTER SCIENCE — 22 graduates, 53% employed, 5% unemployed, 42% transferred, 0% unavailable for work. Salary info- $21,320 average, $20,800 to $21,840 range.

COMPUTER TECHNOLOGY — 10 graduates, 63% employed, 0% unemployed, 38% transferred, 0% unavailable for work. Salary info - NA.

DATA PROCESSING — 7 graduates, 100% employed, 0% unemployed, 0% transferred, 0% unavailable for work. Salary info- $16,720 average, $13,520 to $20,000 range.

ENGINEERING AND TECHNOLOGY

CHEMICAL ENGINEERING TECHNOLOGY — 6 graduates, 50% employed, 17% unemployed, 33% transferred, 0% unavailable for work. Salary info - NA.

CIVIL ENGINEERING TECHNOLOGY — 21 graduates, 55% employed, 15% unemployed, 30% transferred, 0% unavailable for work. Salary info - $21,240, average, $12,480 to $30,000 range.

ELECTRICAL ENGINEERING TECHNOLOGY — 21 graduates, 35% employed, 20% unemployed, 45% transferred, 0% unavailable for work. Salary info - $18,340 average, $12,480 to $25,000 range.

ENGINEERING SCIENCE — 41 graduates, 5% employed, 0% unemployed, 95% transferred. 0% unavailable for work. Salary info - NA.

INDUSTRIAL TECHNOLOGY — 22 graduates, 89% employed, 0% unemployed, 11% transferred, 0% unavailable for work. Salary info - NA.

MECHANICAL ENGINEERING TECHNOLOGY — 13 graduates, 23% employed, 0% unemployed, 77% transferred, 0% unavailable for work. Salary info - NA.

TOOL AND DIE — 2 graduates, 100% employed, 0% unemployed, 0% transferred, 0% unavailable for work. Salary info - NA.

HEALTH SCIENCES

DENTAL HYGIENE — 21 graduates, 100% employed, 0% unemployed, 0% transferred, 0% unavailable to work. Salary info- $25,704 average, $22,464 to $29,016 range.

MEDICAL ASSISTANT — 8 graduates, 100% employed, 0% unemployed, 0% transferred, 0% unavailable for work. Salary info- $15,080 average, $14,560 to $16,640 range.

MEDICAL LABORATORY TECHNOLOGY — 10 graduates, 78% employed, 0% unemployed, 22% transferred, 0% unavailable for work. Salary info - $20,342 average, $19,071 to $21,840 range.

MEDICAL RECORDS TECHNOLOGY — 12 graduates, 75% employed, 17% unemployed, 8% transferred, 0% unavailable for work. Salary info - $16,041 average, $12,480 to $18,500 range.

NURSING — 85 graduates, 96% employed, 0% unemployed, 4% transferred, 0% unavailable for work. Salary info - $23,467 average,$18,737 to $29,640 range.

PHYSICAL THERAPIST ASSISTANT — 13 graduates, 92% employed, 0% unemployed, 8% transferred, 0% unavailable for work. Salary info - $20,083 average, $19,000 to $22,610 range.

RADIOLOGIC TECHNOLOGY — 6 graduates, 83% employed, 0% unemployed, 0% transferred, 17% unavailable for work. Salary info - $20,080 average, $17,306 to $24,000 range.

LIBERAL ARTS

ASSOCIATE IN ARTS DEGREE — 187 graduates, 18% employed, 1% unemployed, 78% transferred, 3% unavailable for work. Salary info - $15,338 average, $12,480 to $19,760 range.

ASSOCIATE IN SCIENCE DEGREE — 5 graduates, 0% employed, 0% unemployed, 100% transferred, 0% unavailable for work. Salary info - NA.

COMMUNICATION AND MEDIA ARTS — 27 graduates, 54% employed, 4% unemployed, 38% transferred, 4% unavailable for work. Salary info - NA.

MENTAL HEALTH EMPHASIS — 28 graduates, 29% employed, 4% unemployed, 64% transferred, 4% unavailable for work. Salary info - NA.

SPECIAL CAREERS

CRIMINAL JUSTICE — 32 graduates, 52% employed, 0% unemployed, 42% transferred, 6% unavailable for work. Salary info- NA.

EARLY CHILDHOOD — 18 graduates, 76% employed, 6% unemployed, 18% transferred, 0% unavailable for work. Salary info- $11,414 average, $10,400 to $13,104 range.

FIRE PROTECTION TECHNOLOGY — 6 graduates, 100% employed, 0% unemployed, 0% transferred, 0% unavailable for work. Salary info - NA.

INDIVIDUAL STUDIES (AS) — 16 graduates, 10% employed, 0% unemployed, 80% transferred, 10% unavailable for work. Salary info - NA.

INDIVIDUAL STUDIES (AAS) — 1 graduate, 100% employed, 0% unemployed, 0% transferred, 0% unavailable for work. Salary info - NA.

PARALEGAL — 23 graduates, 80% employed, 0% unemployed, 10% transferred, 10% unavailable for work. Salary info - $15,474 average, $14,141 to $17,056 range.

PART 2

Program Displays

Business and Office Technologies

Accounting....39
Banking/Finance Emphasis....39
Business Administration....40
Entrepreneurship....40
Management....41
Marketing....41
Retail Management....42
Accounting (Part-time only)....43
Management & Marketing (Part-time only)....43
Hotel/Restaurant Management....44
Travel and Tourism....45
Executive Secretary....46
Word/Information Processing....47
Office Technologies Certificate....47

Health Sciences

Dental Hygiene....49
Dietary Manager....49
Medical Assistant....50
Medical Laboratory Technology....51
Medical Record Technology....52
Nursing....53
Physical Therapist Assistant....54
Radiologic Technology....55

Liberal and General Studies

Associate in Arts....57
Associate in Science....57
Model Programs....59
Special Transfer Agreement Programs....61
Communication and Media Arts....62
Criminal Justice....64
Early Childhood....65
Fire Protection Technology....66
Individual Studies....67
Mental Health....69
Paralegal....68
Interior Design....69

Technologies, Engineering, Computing

Chemical Engineering Technology....71
Civil Engineering Technology....72
Computer Science....74
Computer Technology....76
Computer Information Systems....76
Electrical Engineering Technology....78
Engineering Science....80
Mechancial Engineering Technology....81
Industrial Technology (Part-time only)....82



BUSINESS

DEPARTMENT CHAIRPERSON, Richard P. Behr
Business Building, Room 107
Telephone 778-5000 ext. 5008

ACADEMIC ADVISOR, Wayne Lockwood
Business Building, Room 103
Telephone 778-5000 ext. 5008

CURRICULUM COORDINATOR, John Bunnell
Business Building, Room 218
Telephone 778-5000 ext. 5143

CURRICULUM COORDINATOR, William Matechak
Business Building, Room 204
Telephone 778-5000 ext. 5142

The Department of Business offers programs in three areas of study — Accounting, Business Administration, and Marketing/Management. In addition, the accounting curriculum offers an emphasis in banking, and the marketing/management curriculum offers emphases in marketing, management, retail management, and entrepreneurship. These programs were planned with the assistance of advisory committees made up of individuals currently working in the various areas of business involved. To assist the incoming student in selecting the proper option, all have a common first semester. Thus, the student can delay selection of a program until registration for the second semester. During the first semester of study, all full-time students will be assigned an advisor to assist them in selecting a program and appropriate courses.

Programs in Accounting, Marketing, Management, Entrepreneurship, Banking and Retail Management are career oriented and designed to prepare the graduate for immediate employment. Opportunities exist locally for careers in these fields. The student should note that, although these programs are not designed specifically for transfer, they do provide good transfer opportunities to many four-year colleges and universities. Many four-year schools will accept graduates of these programs at full junior status.

The Business Administration program is designed to facilitate transfer to four-year colleges and universities. If the proper elective sequences are followed, this option will allow the student junior status at almost all four-year schools. It is of the utmost importance that students confer with their advisor before choosing electives.

In addition to the programs above, the Department of Business offers uniquely constructed programs in Accounting and Marketing/Management for part time evening and College-on-the-Weekend students. The College-on-the-Weekend program offers students the opportunity to take classes which meet only every third weekend for a total of only six weekends per semester.

Cooperative work experience is available to many business students. This offers the student first hand practical experience and college credit.



CURRICULUM ADVISORY COUNCIL

GENERAL BUSINESS

RON BARBER — Matco Electric Co.
FRANK BERRISH — IBM Credit Union
ROBIN DEBRITA — Simmonds Precision
STEVE GARDNER — GHS Credit Union
RUTH GDOVIN — Personnel, Broome County
JOHN GIANGRIECO — Universal Instruments, Inc.
VERNON GOAD — CVS Drug Stores, Inc.
DOREEN GLOWIENKA — IBM Corporation
CLYDE GRUVER — Century 21 Clyde Gruver Realty
ED HOGG — Chase Lincoln First Bank
JANET KANICK — Dover Electronics, Inc.
TOM KETRICK — Ketrick Insurance, Inc.
BOB MOPPERT — MAPES Moving and Storage, Inc.
ROB SALAMIDA — Rob Salamida Co.
MARK STANLEY — C.P.A.
DENNIS WALKER — C.P.A.
BOB WHITE — Jo-Kel Restaurant, Inc.

ACCOUNTING

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
BUS 100	Accounting I	4	0	4
BUS 107	Freshman Experience	1	0	1
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
ENG 110	Written Expression I	3	0	3
*BUS 112	Quantitative Business Methods	3	0	3
		17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090 and QBM or QBM or Introduction to Business

Spring Semester				
BUS 101	Accounting II	4	0	4
BUS 120W	Business Law II	3	0	3
CST 107	Business Appl. Micro Computer	3	0	3
BUS	Elective (Pick one elective from group A below)	3-4	0-2	3-4
MAT 139	Algebra (or higher numbered math course)	3-4	0	3-4
		16-18	0-2	16-18

SECOND YEAR				
Fall Semester				
#BUS 200	Intermediate Accounting I	4	0	4
#BUS 205	Cost Accounting I	4	0	4
——	Lab Science	3	2-3	4
ECO 110W	Micro Economics	3	0	3
SPK 102	Effective Speaking	3	0	3
		17	2-3	18

Spring Semester				
#BUS 201	Intermediate Accounting II	4	0	4
#BUS 206	Cost Accounting or			
#BUS 210	Managerial Accounting	4	0	4
ENG 220	Communicating About Values	3	0	3
BUS	Elective (pick one elective from group B below)	3-4	0-2	3-4
——	Social Science Elective	3	0	3
		17-18	0-2	17-18

Total Credits: 68-71

Group A Electives: BUS 115★, BUS 224, BUS 245, BUS 249, BUS 262, or a programming language (CST).
Group B Electives: BUS 206, BUS 210, BUS 224, BUS 245, BUS 249, BUS 262, BUS 270★, BUS 295 or a programming language (CST).

★ BUS 115 is a prerequisite for BUS 270.

#Take these courses in the semester (spring or fall) indicated. They are not offered in all semesters.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

ACCOUNTING

Banking/Finance Emphasis

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part-time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
BUS 100	Accounting I	4	0	4
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
ENG 110	Written Expression	3	0	3
BUS 107	Freshman Experience	1	0	1
*BUS 112	Quantitative Business Methods	3	0	3
	Total	17	0	17

*Depending on Mathematics entrance testing scores and math background, student will take: MAT 090 and QBM or QBM or Introduction to Business.

Spring Semester				
——	Math or Science Elective	3-4	0-3	3-4
BUS 101	Accounting II	4	0	4
BUS 120W	Business Law II	3	0	3
#BNK 168	Principles of Banking	3	0	3
ECO 111	Macro Economics	3	0	3
	Total	16-17	0-3	16-17

SECOND YEAR				
Fall Semester				
BNK	Banking Elective	3	0	3
#BUS 131	Personal Finance	3	0	3
BUS 152	Selling Fundamentals	3	0	3
ECO 110W	Micro Economics	3	0	3
——	Lab Science	3	3	4
SPK 102	Effective Speaking	3	0	3
	Total	18	3	19

Spring Semester				
ENG 220	Communicating About Values	3	0	3
#BUS 135	Investments	3	0	3
BNK	Banking Elective	3	0	3
CST 107	Bus. Appl. on Microcomputer	3	0	3
BUS 224	Bus. Finance	3	0	3
	Total	15	0	15

Total Credits: 67-68

#Take these courses in the semester (spring or fall) indicated. They are not offered in all semesters.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

NOTE: BNK courses meet evenings only.

BUSINESS ADMINISTRATION

(TRANSFER)

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
BUS 100	Accounting I	4	0	4
BUS 107	Freshman Experience	1	0	1
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
ENG 110	Written Expression I	3	0	3
*BUS 112	Quantitative Business Methods	3	0	3
	Total	17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090 and QBM or QBM or Introduction to Business.

Spring Semester				
BUS 101	Accounting II	4	0	4
BUS 120W	Business Law II	3	0	3
BUS 115	Business Statistics	3	0	3
§— —	Business, Computer Studies or Liberal and General Studies Elective	3	0-2	3
SPK 102	Effective Speaking	3	0	3
§— —	Select one of the following:			
CST 115	Introduction to PASCAL	2	2	3
CST 118	Introduction to COBOL	2	2	3
CST 107	Business Appl. Microcomputer	3	0	3
	Total	18-19	0-4	19

SECOND YEAR				
Fall Semester				
ECO 110W	Micro Economics	3	0	3
#MAT 145	Finite Math or higher number MAT course (except MAT 161, 162)..	3	0	3
— —	Lab Science Elective	3	3	4
§— —	Liberal and General Studies Elective	3	0	3
PED	Physical Education	2	0	1
§— —	Liberal and General Studies or Business or Computer Studies elective	3-4	0-3	3-4
	Total	17-18	3-6	17-18
Spring Semester				
ECO 111	Macro Economics	3	0	3
#MAT 146	Introduction to Calculus	3	0	3
— —	Lab Science Elective	3	3	4
§— —	Liberal and General Studies Elective	3	0	3
ENG 220	Communicating About Values	3	0	3
	Total	15-16	0-3	16-17

Total Credits: 69-71

§To maximize transfer credit, students **must see their academic advisor** for counseling concerning the proper selection of business, liberal and general studies, and computer science electives. Generally, liberal and general studies electives are recommended for transfer.

#Business Administration students may not use MAT 162 AND MAT 146 for credit.

MARKETING/ MANAGEMENT/SALES

Entrepreneurship Emphasis

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
BUS 100	Accounting I	4	0	4
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
*BUS 112	Quantitative Business Methods	3	0	3
BUS 107	Freshman Experience	1	0	1
ENG 110	Written Expression I	3	0	3
		17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090 and QBM or QBM or Introduction to Business.

Spring Semester				
CST 107	Bus. Appl. Micro Computer	3	0	3
BUS 101	Accounting II	4	0	4
BUS 120W	Business Law II	3	0	3
— —	Social Science Elective	3	0	3
$MAT 117	Elem. Finite Math	3-4	0	3-4
		16-17	0	16-17

SECOND YEAR				
Fall Semester				
BUS 131	Personal Finance	3	0	3
#BUS 224	Business Finance	3	0	3
SPK 102	Effective Speaking	3	0	3
PHS 111	Physical Science Today	3-4	3	3-4
ECO 110W	Micro Economics	3	0	3
		15-16	3	15-16
Spring Semester				
#BUS 266	Adv. + Pro. for SB	4	0	4
#BUS 263	Small Business Seminar	4	0	4
BUS 245	Management Behavioral	3	0	3
ENG 220	Communicating About Values	3	0	3
	Select one of the following			
##BUS 297	Co-Op	3	0	3
or				
BUS	Business Elective	3-4	0	3-4
		17-18	0	17-18

Total Credits: 65-68

†Students who are planning to transfer are advised to take a four credit lab science elective.

Recommended.

Take these courses in the semester (spring or fall) indicated. They are not offered in all semesters.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

$ Students may also select MAT 124 or MAT 139 or a MAT course with a number greater than 139.

MARKETING/ MANAGEMENT/SALES

Management Emphasis

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR			Hours per Week		Credits per
Fall Semester			Class	Lab	Semester
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	
*BUS	112	Quantitative Business Methods	3	0	3
BUS	107	Freshman Experience	1	0	1
			17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090 and QBM or QBM or Introduction to Business

Spring Semester					
BUS	101	Accounting II	4	0	4
BUS	120W	Business Law II	3	0	3
BUS	152	Selling Fundamentals	3	0	3
—	—	Lab Science	3	3	4
MAT	139	Algebra or higher numbered math course	3-4	0	3-4
			16-17	3	17-18

SECOND YEAR					
Fall Semester					
BUS	115	Business Statistics	3	0	3
#BUS	224	Business Finance	3	0	3
BUS	245	Management: A Behavioral Approach	3	0	3
CST	107	Business Appl. Micro Computer	3	0	3
SPK	102	Effective Speaking	3	0	3
ECO	110W	Micro-Economics	3	0	3
			18	0	18
Spring Semester					
ENG	220	Communicating About Values	3	0	3
#BUS	270	Management Science	3	0	3
BUS	249	Personnel Management	3	0	3
ECO	111	Macro-Economics	3	0	3
$ —	—	BUS/CST or Liberal and General Studies Elective	2-3	0-2	3
			14-15	0-2	15

Total Credits: 67-68

Take these courses in the semester (spring or fall) indicated. They are not offered in all semesters.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

$ Students should not use BUS 110 Introduction to Business as their elective.

MARKETING/ MANAGEMENT/SALES

Marketing Emphasis

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR			Hours per Week		Credits per
Fall Semester			Class	Lab	Semester
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	3	0	3
BUS	107	Freshman Experience	1	0	1
			17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090 and QBM or QBM or Introduction to Business

Spring Semester					
BUS	120W	Business Law II	3	0	3
BUS	249	Personnel Management	3	0	3
ECO	110W	Micro Economics	3	0	3
PSY	110	General Psychology	3	0	3
SPK	102	Effective Speaking	3	0	3
			15	0	15

SECOND YEAR					
Fall Semester					
#BUS	229	Advertising	4	0	4
CST	107	Business Appl. Micro Computer	3	0	3
BUS	152	Selling Fundamentals	3	0	3
PHS	111	Physical Science for Today	2	2	3
BUS		Business Elective	3-4	0	3-4
ENG	220	Communicating About Values	3	0	3
			18-19	2	19-20
Spring Semester					
#BUS	129	Consumer Behavior	3	0	3
BUS	259	Business Report Writing	3	0	3
#BUS	242	Marketing Seminar	3	0	3
BUS	245	Management: A Behavioral Approach	3	0	3
#BUS	264	Retailing	3	0	3
—	—	Mathematics or Science Elective	3-4	0-3	3-4
			18-19	0-3	18-19

Total Credits: 69-71

Take these courses in the semester (spring or fall) indicated. They are not offered in all semesters.

† Students who are planning to transfer are advised to take a four credit lab science elective.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

MARKETING/ MANAGEMENT/SALES

Retail Management Emphasis

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
BUS 100	Accounting I	4	0	4
BUS 118	Business Law I	3	0	3
BUS 141	Marketing	3	0	3
ENG 110	Written Expression I	3	0	3
*BUS 112	Quantitative Business Methods	3	0	3
BUS 107	Freshman Experience	1	0	1
		17	0	17

*Depending on Mathematics entrance testing scores and Math background, the student will take: MAT 090 and QBM or QBM or Introduction to Business

Spring Semester				
#BUS 264	Retailing	3	0	3
BUS 120W	Business Law II	3	0	3
#BUS 129	Consumer Behavior	3	0	3
ECO 110W	Micro Economics	3	0	3
——	Social Science Elective	3	0	3
SPK 102	Effective Speaking	3	0	3
		18	0	18

SECOND YEAR				
Fall Semester				
CST 107	Business Appl. Micro Computer	3	0	3
#BUS 265	Retail Merchandising	3	0	3
BUS 152	Selling Fundamentals	3	0	3
BUS 259	Report Writing	3	0	3
**——	Math or Science Elective	3-4	0-3	3-4
		15-16	0-3	15-16

Spring Semester				
#BUS 130	Retail Management	3	0	3
BUS	Business Elective	3-4	0	3-4
BUS 245	Management: A Behavioral Approach	3	0	3
ENG 220	Communicating About Values	3	0	3
PHS 111	Physical Science	2-3	2-3	3-4
		14-16	2-3	15-17

Total Credits: 65-68

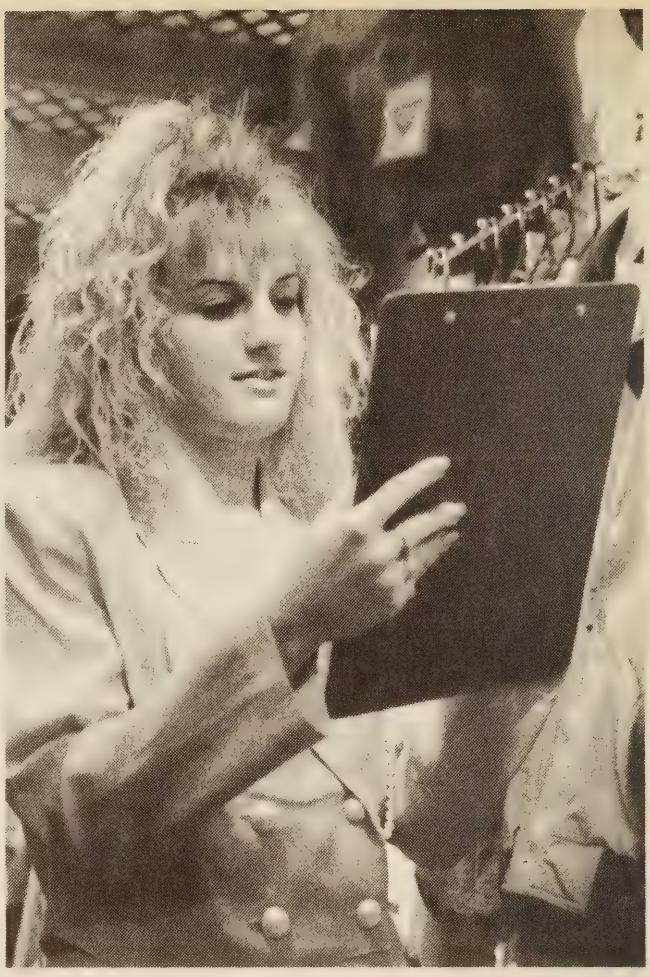
† Students who are planning to transfer are advised to take a four credit lab science elective.

** Recommended that the student consider MAT 117, 124, or 145 when selecting a Math course.

Take these courses in the semester (spring or fall) indicated. They are not offered in all semesters.

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available to when courses must be taken, but not all courses are offered every semester.



ASSOCIATE IN APPLIED SCIENCE - BUSINESS
(FOR PART-TIME EVENING AND WEEKEND STUDENTS ONLY)

ACCOUNTING

DEPARTMENT CHAIRPERSON, Richard Behr, 778-5000 ext. 5008
ACADEMIC ADVISOR, Wayne Lockwood, 778-5000 ext. 5008

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

	Introductory Courses		Credits
	BUS 100	Accounting I	4
#	BUS 112	Quan. Business Methods	3
	BUS 118	Business Law I	3
	BUS 141	Marketing	3
	ENG 110	Written Expression I	3
	Additional Courses for Certificate		
	BUS 101	Accounting II	4
	BUS 200	Intermediate Accounting I	4
	BUS	Business Elective	3-4
	CST 107	Bus Aplctn Micro Comp	3
	——	Social Science Elective	3
			33-34
	Remaining Courses for Degree		
	BUS 120W	Business Law II	3
	BUS 201	Intermediate Accounting II	4
	BUS 205	Cost Accounting I	4
	BUS 210	Managerial Accounting or	
	BUS 206	Cost Accounting II	4
	ENG 220	Communicating About Values	3
†	——	Math or Science Elective	3-4
	——	Math 139 or higher numbered Math Course	3-4
	SPK 102	Effective Speaking	3
	BUS	Business Elective	3-4
	ECO 110W	Micro Economics	3
	AAS-Business (Accounting) Total Credits		66-70

#Depending on Mathematics entrance test scores and math background, the student will take: MAT 090 and QBM, or QBM, or Introduction to Business.

†Students who are planning to transfer are advised to take a four credit lab science elective.

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

MARKETING/ MANAGEMENT/SALES

General Emphasis

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

	Introductory Courses		Credits
	BUS 100	Accounting I	4
	BUS 101	Accounting II	4
#	BUS 112	Quan. Business Methods	3
	BUS 118	Business Law I	3
	ENG 110	Written Expression I	3
	BUS 141	Marketing	3
	Additional Courses for Certificate		
	BUS 259	Report Writing	3
	——	Liberal and General Studies Elective	3
	BUS	Business Electives	7
			33
	Remaining Courses for Degree		
	BUS 120W	Business Law II	3
	BUS	Business Electives	8
	——	Business Related Electives (see below)	3
	——	Social Science Elective	3
	ENG 220	Communicating About Values	3
	BUS 115	Business Statistics	3
†	PHS 111	Physical Science for Today	3
	——	Math or Science Elective	3-4
	ECO 110W	Micro Economics	3
	CST 107	Bus Aplctn Micro Comp	3
	AAS in Marketing/Management Total Credits		68-69

Suggested Management Electives: BUS 210, BUS 224, BUS 245, BUS 246, BUS 249, BUS 252, BUS 255, BUS 258, BUS 262, BUS 270.

Suggested Marketing Electives: BUS 110, BUS 129, BUS 131, BUS 135, BUS 152, BUS 154, BUS 229, BUS 238, BUS 262, BUS 264.

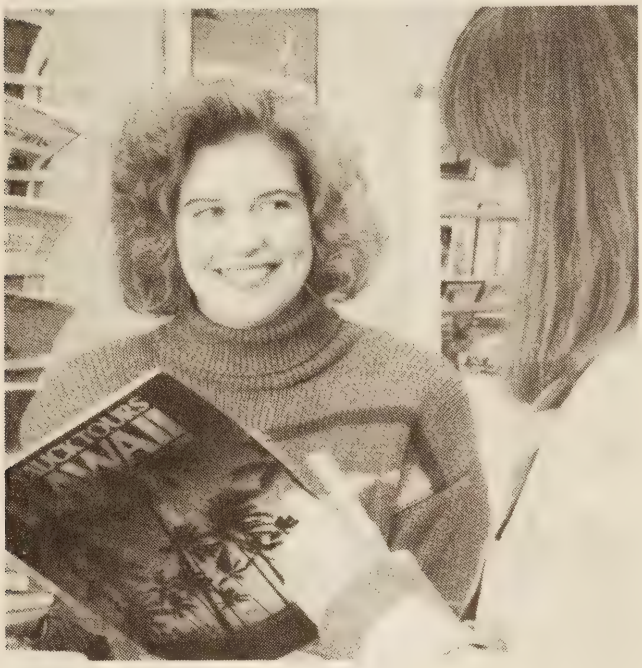
Business related courses choose from BUS, DOT, CST, TAE, MAT, MET, BNK.

†Students who are planning to transfer are advised to take a four credit lab science elective.

NOTE: A number of choices exist in The Business - General Emphasis Program. By carefully selecting the proper Business courses, students can generate a concentration in a particular field, such as Sales, Retailing or Management. To identify these courses, students should discuss their interests with their academic advisor.

#Depending on Mathematics entrance test scores and math background, the student will take: MAT 090 and QBM, or QBM, or Introduction to Business.

TOURISM AND HOSPITALITY MANAGEMENT



ACTING DEPARTMENT CHAIRPERSON, TBA
ACADEMIC ADVISOR, Wayne Lockwood
Business Building, Room 106
Telephone 778-5000 ext. 5008

CURRICULUM ADVISORY COUNCIL

TOURISM AND HOSPITALITY MANAGEMENT

SHARON L. DYER — Carlson Travel
DOLLY ZIZAK — Days Inn
PETER HICKEY — Red Roof Inn
TILLY CARBO — Hotel deVille
JAMES McCOY — Number 5 and Dion's
PATRICK REARDON — P.T. Reardon's
DAN SMITH — Hertz Rent A Car
RICHARD SCHAAL — Plaza Travel
SANDY SHEPARD — US Air
BECKY SHRAUGER — Budget Rent A Car
GAIL KREPPEL — Jet Away Travel
CINNAMON LITTLE — Jet Away Travel
ROSANNA RASPANTI — Broome County Convention and Visitors Bureau
BETTY ROGERS — Endwell Travel

HOTEL/RESTAURANT MANAGEMENT

Hotel Emphasis

COORDINATOR TBA
Business Building, Room 106
Telephone 778-5000 ext. 5008

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR			Hours per Week		Credits per
Fall Semester			Class	Lab	Semester
BUS	100	Accounting I	4	0	4
BUS	107	The Freshman Experience	1	0	1
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	3	0	3
BUS	110	or Intro to Business	3	0	3
			17	0	17

*Depending on Mathematics entrance testing scores, the student will take MAT 090 and QBM or Intro. to Business or QBM.

Spring Semester					
TAE	103	Front Office Management	3	0	3
TAE	110	Sanitation Management	1	0	1
ECO	110W	Intro to Micro Economics	3	0	3
BUS	249	Personnel Management	3	0	3
—	—	Math or Science Elective	3-4	0-3	3-4
SPK	102	Effective Speaking	3	0	3
			16-17	0-3	16-17

SECOND YEAR					
Fall Semester					
TAE	101	Principles of Food Service	1	6	3
—	—	Social Science Elective	3	0	3
TAE	208W	Hotel/Restaurant Law	3	0	3
TAE	212	Hotel Marketing & Advertising	3	0	3
—	—	Math or Science Elective	3-4	0-3	3-4
			13-14	6-9	15-16

Spring Semester					
ENG	220	Communicating About Values	3	0	3
TAE	242W	Sales Promotion & Convention Service	3	0	3
TAE	256	Banquets & Catering	2	3	3
TAE	206	Supervisory Housekeeping/ Property Mgt.	3	0	3
TAE	265	Food/Beverage/Labor Costs	3	0	3
TAE	298	Hotel Internship	3	0	3
			17	3	17-18

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

HOTEL/RESTAURANT MANAGEMENT—

Restaurant Emphasis

COORDINATOR TBA
Business Building, Room 106
Telephone 778-5000 ext. 5008

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR			Hours per Week		Credits per
Fall Semester			Class	Lab	Semester
BUS	100	Accounting	4	0	4
BUS	107	The Freshman Experience	1	0	1
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	3	0	3
BUS	110	or Intro to Business	3	0	3
			17	0	17

*Depending on Mathematics entrance testing scores, the student will take: MAT 090 and QBM or Introduction to Business

Spring Semester					
BUS	249	Personnel Management	3	0	3
TAE	101	Principles of Food Service	1	6	3
TAE	105	Front of the House Management	3	0	3
TAE	110	Sanitation Management	1	0	1
ECO	110W	Intro to Micro Economics	3	0	3
		Math or Science Elective	(3-4)	(0-3)	(3-4)
			14-15	6-9	16-17

SECOND YEAR					
Fall Semester					
TAE	208W	Hotel/Restaurant Law	3	0	3
TAE	256	Banquets & Catering	2	3	
—	—	Social Science Elective	3	0	3
TAE	207	Hospitality Principles	3	0	3
SPK	102	Effective Speaking	3	0	3
		Math or Science Elective	(3-4)	(0-3)	(3-4)
			17-8	3-6	18-19

Spring Semester					
TAE	265	Food/Beverage/Labor Costs	3	0	3
ENG	220	Communicating About Values	3	0	3
TAE	242W	Sales Promotions Convention Service	3	0	3
TAE	206	Supervisory Housekeeping/Property Management	3	0	3
TAE	298	Restaurant Internship	3	0	3
			15	0	15

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

TRAVEL AND TOURISM

COORDINATOR, TBA
Business Building, Room 106
Telephone 778-5000 ext. 5008

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR			Hours per Week		Credits per
Fall Semester			Class	Lab	Semester
BUS	107	The Freshman Experience	1	0	1
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
BUS	141	Marketing	3	0	3
ENG	110	Written Expression I	3	0	3
*BUS	112	Quantitative Business Methods	3	0	3
BUS	110	or Intro to Business	3	0	3
			17	0	17

*Depending on Mathematics entrance testing scores, the student will take: MAT 090 and QBM or Introduction to Business

Spring Semester					
TAE	102	Travel & Tourism I	3	0	3
DOT	100	Keyboarding	1	0	1
BUS	120W	Business Law II	3	0	3
SPK	102	Effective Speaking	3	0	3
MAT	139	Algebra	4	0	4
—	—	Social Science Elective	3	0	3
			17	0	17

SECOND YEAR					
Fall Semester					
TAE	117	Travel & Tourism II	3	0	3
TAE	217W	Travel & Tourism III	3	0	3
BUS	152	Selling Fundamentals	3	0	3
PHS	113-116	Physical Science	3	3	4
BUS	259	Report Writing	3	0	3
			15	3	16

Spring Semester					
TAE	291	Travel & Tourism IV	3	0	3
CST	107	Business App. Micro Comp	3	0	3
BUS	262	Small Bus. Management	3	0	3
ENG	220	Communicating About Values	3	0	3
—		Social Science Elective	3	0	3
		Select one of the following:			
BUS		Business Elective	3	0	3
TAE	298A	Internship	3	0	3
			18	0	18

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

W - Writing Emphasis Course

OFFICE TECHNOLOGIES

DEPARTMENT CHAIRPERSON, Patricia Franks
Business Building, Room 107
Telephone 778-5000 ext. 5008

Broome Community College offers two AAS degree programs of study in the Department of Office Technologies: Executive Secretary and Word/Information Processing. The department also offers a nine-month Office Technologies Certificate and several options for a Unit of Concentration Certificate.

Executive Secretary students become proficient in a variety of skills through study in such courses as keyboarding, shorthand (symbolic or alphabetic), office procedures, word processing, and information processing applications. Graduates are prepared to handle administrative and word processing responsibilities in traditional offices as well as in electronic offices. These positions can be found in banking, business, insurance, legal, medical, governmental, educational, industrial, and engineering offices.

Word/Information Processing students concentrate their study in such areas as word processing concepts; text editing functions and applications; information processing using the spreadsheet, a data base, and graphics; and the administration of electronic offices. These graduates are prepared to handle the basic operations and administrative duties of the integrated electronic office.

Office Technologies Certificate students complete a thirty-credit option of study in nine months for entry-level employment. This program is especially attractive for students with liberal arts background or limited office skills training. These students can design their own program as outlined on page 47.

The Unit of Concentration Certificate is available for students who wish to obtain knowledge in a particular field without committing to a full-time degree program. A student may earn a certificate in Word/Information Processing, Shorthand/Speedwriting, Keyboarding, or Business Communications by completing from three to five courses as outlined on page 47.

Students are encouraged to become members of Collegiate Secretaries International. Membership in this organization affords students the opportunity to combine an interest in new technology with inter-personal skills, develop teamworking abilities, network with peers and professionals, gain personal recognition, and meet community leaders.

CURRICULUM ADVISORY COUNCIL
OFFICE TECHNOLOGIES

KATHY BROWN — IBM - Westover
ROBERTA BRUNDAGE — Oxford Gerontology Center
CAROL HINTON — Office Products Ltd.
REGINA W. MURPHY — NYSEG
MARTHA OSBORNE — IBM - Endicott
ISABEL P. ROSSI — Stafking Temporaries
BERNARD SETTA — General Electric
BENITA SICKLES — NYSEG
ANDREA TOTMAN — IBM Corp. - Owego
KAREN TREICHLER — Singer-Link Co.

EXECUTIVE SECRETARY

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
DOT 103	Keyboarding	2	3	3
DOT 109	Basic Transcription	3	0	3
DOT 130	Freshman Seminar	1	0	1
*BUS 112	Quantitative Business Methods	3	0	3
BUS 118	Business Law I	3	0	3
ENG 110	Written Expression I	3	0	3
		15	3	16

*Depending on Mathematics entrance testing scores, the student will take MAT 090 and/or BUS 112.

Spring Semester				
DOT 120	Keyboarding/Word Processing Applications	2	3	3
DOT 110	Gregg Shorthand OR	2	3	3
DOT 112	Speedwriting	2	3	3
DOT 151	Business Communications	3	0	3
BUS 112	Quantitative Business Methods if not taken in first semester	3	0	3
——	Lab Science Elective	2	2	3
§——	Social Science Elective	3	0	3
		12-15	8	15-18

SECOND YEAR				
Fall Semester				
DOT 214	Introduction to Information Management	1	4	3
DOT 113	Shorthand/Speedwriting Transcription	2	3	3
DOT 215	Information Processing Using Lotus 1-2-3	3	0	3
DOT 262W	Dynamics of Success I	1	0	1
BUS 100	Accounting I	4	0	4
——	Social Science Elective	3	0	3
		14	7	17

Spring Semester				
DOT 231	Shorthand/Speedwriting Transcription Applications	2	3	3
DOT 242W	Office Procedures	3	0	3
DOT 260	Office Technology Practicum	0	4	2
ENG 220	Communicating About Values	3	0	3
——	Liberal Arts Elective	3	0	3
——	Math/Science Elective	2-3	2-3	3-4
	Total Credits: 65-66	13-14	9-10	17-18

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

§At least one of the social science electives must be from the following courses: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.

WORD/INFORMATION PROCESSING

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
DOT 103	Keyboarding	2	3	3
DOT 109	Basic Transcription	3	0	3
DOT 130	Freshman Seminar	1	0	1
*BUS 112	Quantitative Business Methods	3	0	3
BUS 118	Business Law I	3	0	3
ENG 110	Written Expression I	3	0	3
		15	3	16

*Depending on Mathematics entrance testing scores, the student will take MAT 090 and/or BUS 112.

Spring Semester				
DOT 120	Keyboarding/Word Processing Applications	2	3	3
DOT 141	Word/Information Processing	3	0	3
DOT 151	Business Communications	3	0	3
BUS 112	Quantitative Business Methods if not taken in first semester	3	0	3
——	Lab Science Elective	2	2	3
§——	Social Science Elective	3	0	3
		13-16	5	15-18

SECOND YEAR				
Fall Semester				
DOT 214	Introduction to Information Management	1	4	3
DOT 215	Information Processing Using Lotus 1-2-3	3	0	3
DOT 236	Machine Transcription	2	3	3
DOT 262W	Dynamics of Success I	1	0	1
BUS 100	Accounting I	4	0	4
§——	Social Science Elective	3	0	3
		14	7	17

Spring Semester				
DOT 220	Principles of Information Processing Management	3	0	3
DOT 242W	Office Procedures	3	0	3
DOT 260	Office Technology Practicum	0	4	2
ENG 220	Communicating About Values	3	0	3
——	Liberal Arts Elective	3	0	3
——	Math/Science Elective	2-3	2-3	3-4
	Total Credits: 65-66	14-15	6-7	17-18

W - Writing Emphasis Course

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

§At least one of the social science electives must be from the following courses: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.

Office Technologies Certificate

Candidates must complete the following requirements:

- a minimum of 30 academic credits with a GPA of 2.0 or higher
- 15 credits from the Department of Office Technologies
- 15 credits from any department on campus including Office Technologies and/or Business
- meetings with an Office Technologies academic advisor to review course prerequisites and to plan the following semester.

Suggested courses are:

DOT	103	Keyboarding
DOT	109	Basic Transciption
DOT	110	Shorthand
or		
DOT	112	Speedwriting
DOT	120	Keyboarding/Word Processing Applications
DOT	130	Freshman Seminar
DOT	141	Word/Information Processing
DOT	151	Business Communications
DOT	214	Introduction to Information Management
DOT	262W	Dynamics of Success I

UNIT OF CONCENTRATION

Candidates may select one of the following options:

KEYBOARDING

DOT	103	Keyboarding
DOT	120	Keyboarding/Word Processing Applications
DOT	214	Introduction to Information Management

BUSINESS COMMUNICATIONS

DOT	103	Keyboarding
DOT	109	Basic Transcription
DOT	151	Business Communications

SHORTHAND/SPEEDWRITING

DOT	110	Gregg Shorthand
DOT	112	Speedwriting
DOT	113	Shorthand/Speedwriting Transcription
DOT	231	Shorthand/Speedwriting Applications

WORD/INFORMATION PROCESSING

DOT	120	Keyboarding/Word Processing Applications
DOT	141	Word/Information Processing
DOT	214	Introduction to Information Management
DOT	215	Information Processing Applications I
DOT	220	Information Processing Applications II

Students should check with their advisor during the scheduling process to make sure courses are taken in proper sequence and any prerequisites have been met. Some flexibility is available as to when courses must be taken, but not all courses are offered every semester.

HEALTH SCIENCES



Opportunities for men and women interested in the health sciences field are provided in seven areas - Dental Hygiene, Medical Assistant, Medical Laboratory Technology, Medical Record Technology, Nursing, Physical Therapist Assistant, and Radiologic Technology. All Health Science associate degree programs are fully accredited. All Health Science students must meet the required prerequisites as listed on page 9 of this catalog prior to taking any professional courses. Graduates are prepared to work immediately after graduation in physicians' or dentists' offices, laboratories or hospitals. Graduates of these programs are also qualified to take whatever licensing or certification examination their professions require. The College also offers a Dietary Manager Certificate program for those working in the field.

Academic Standards for Clinical Education in the Health Sciences Division programs require dismissal of students who fail to meet established academic objectives for the physical safety, psychological safety and confidentiality of patients.

DENTAL HYGIENE

DEPARTMENT CHAIRPERSON, Dorothy J. Walsh
Science Building, Room 108
Telephone 778-5000 ext. 5149

The Dental Hygiene curriculum is designed to prepare students for the contemporary practice of dental hygiene. The curriculum emphasizes the fundamental knowledge necessary for practice in a private dental office or similar clinical setting under the supervision of a dentist.

The dental hygienist performs various services, such as dental prophylaxis, topical fluoride applications, pit and fissure sealants, dental radiographs and instruction in plaque control procedures. Successful completion of the curriculum permits one to take the required written and practical licensure examinations.

In keeping with the college policy regarding non-discrimination the dental hygiene students are expected to treat all patients without regard to race, sex, color, creed, age, national origin, disability, marital status, health status, veteran status or sexual orientation.

Students are required to follow college infection control policies and procedures which are based on CDC Recommendations and OSHA regulations.

Dental Hygiene graduates averaged $25,704 as starting salaries in 1991, encompassing a range from $22,464 - $29,016.

Students who wish to pursue a career as a dental hygienist in public health, health management, health education or dental hygiene education are encouraged to transfer to a baccalaureate program after graduation.

The program is accredited by the Commission on Dental Accreditation, a specialized accrediting body recognized by the Council on Post-Secondary Accreditation and by the United States Department of Education.

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
BIO 131	Human Biology I	3	2	4
DEN 101	Dental Hygiene I	2	8	4
DEN 103	Oral Antaomy and Physiology	2	4	4
ENG 110	Written Expression I	3	0	3
		10	14	15
Spring Semester				
BIO 132	Human Biology II	3	2	4
DEN 102W	Dental Hygiene II	4	9	6
DEN 106	Clinical Dental Radiography	1	2	2
DEN 110	Dental Materials	2	3	3
BIO 160	Microbiology	2	3	3
		12	19	18
SECOND YEAR				
Fall Semester				
DEN 201	Dental Hygiene III	2	12	5
DEN 204	General and Oral Pathology	3	0	3
DEN 205	Periodontology	2	0	2
DEN 209W	Nutrition	3	0	3
DEN 213	Public Health	2	2	3
PSY 110	General Psychology	3	0	3
		15	14	19
Spring Semester				
DEN 202	Dental Hygiene IV	2	12	5
DEN 206	Dental Pharmacology	2	0	2
DEN 214	Current Topics in Dental Hygiene	2	0	2
SOC 110	Introduction to Sociology	3	0	3
ENG 220	Communicating About Values	3	0	3
		12	12	15

NOTE: 1. Students must complete a Dental Hygiene Department Health Questionnaire, PPD Mantoux lab test and be certified in American Heart Association CPR for Health Care Providers (Course C) prior to admittance to Dental Hygiene I. Students must be recertified annually.
2. The department strongly recommends vaccination against Hepatitis B prior to treating patients in Dental Hygiene I.

W - Writing Emphasis Course

GRADUATION REQUIREMENT: 67 CREDITS

CURRICULUM ADVISORY COUNCIL
DENTAL HYGIENE

DONALD BRONSKY, D.D.S., Orthodontist
CLAUDIA CASEY, R.D.H.
KATHY CROWLEY, R.D.H.
CYNTHIA HEALY, R.D.H.
ANTHONY C. PALOMBARO, D.D.S. , General Practice
DAVID PAYNE, D.D.S., Oral Surgery
A. J. PERNA, D.D.S., General Practice
CAROL TULL, R.D.H.
KENNETH WARNER, R.D.H.
J. MICHAEL WEBER, D.M.D., M.S., Periodontist

Dietary Manager

Leads to Certificate

This program is designed for individuals already employed in the food service field, as there is a requirement for supervised work experience by a Registered Dietitian who acts as preceptor to the student. All persons entering the program are responsible for finding a preceptor, and registrations are on a pre-application basis.

		Credits
DIA 101	Nutrition	3
DIA 102	Institution Food Preparation	3
DIA 201	Food Management Systems	3
DIA 202	Personnel Management	3
Apply for Certificate - Dietary Manager		12

More Information:
Judy Komarinetz, Coordinator
(Phone 778-5000 ext. 5343)
Joseph K. Gay (Phone 778-5000 ext. 5161)

CURRICULUM ADVISORY COUNCIL
DIETARY MANAGER

RAYMOND DENNISTON — Director of School Lunch, Susquehanna Valley Schools
JOSEPH GAY — Dean of Health Sciences, Broome Community College
KAREN HOJSIK, R.D. — Consulting Dietitian
JUDITH KOMARINETZ — Coordinator, Dietary Manager Program, Broome Community College
GLORIA ROCKISAK, CDM — Binghamton General Hospital
JEANNE STRACUZZI, R.D. — Consulting Dietitian, Broome County Office for Aging
STUDENT — appointed annually

MEDICAL ASSISTANT

DEPARTMENT CHAIRPERSON, Bonnie Lou Deister
Mechanical Building, Room 220
Telephone 778-5000 ext. 5261

A Medical Assistant is one of the most versatile of all the allied health professionals. There is a variety of employment opportunities available for individuals with associate degrees. These positions are in physicians' offices, medical centers, clinics, hospitals, armed services, laboratories and pharmaceutical companies. One can also find employment in public, industrial, school, and correctional health departments, as well as in the fields of research, publishing and teaching. A medical assistant can seek additional degrees in such fields as allied health services, health care management, and education. The program is designed to enable graduates to do both administrative and clinical/laboratory techniques.

By studying specifically related subjects as medical assisting procedures, clinical laboratory procedures and human biology, students will acquire the knowledge and techniques to prepare patients for examinations and to assist the physician. These courses also prepare students to perform not only routine medical procedures but also electrocardiography, audiometry, urinalysis and hematological tests.

Courses in medical terminology, keyboarding, medical correspondence and medical office management prepare the student to conduct business and administrative duties. English, social sciences, psychology and medical law are included to provide a general background.

Directed Practice is an integral part of the curriculum as senior students participate in a 15 week, externship program that requires a working experience in physicians' offices or other health care facilities.

The curriculum is accredited by the Committee on Allied Health Education and Accreditation in collaboration with the American Medical Association (AMA) and the American Association of Medical Assistants (AAMA). Graduates are awarded the Associate in Applied Science degree and may elect to take a national examination given by the AAMA to become Certified Medical Assistants. This CMA status is known throughout the country, recognizing the graduate as a competent professional and leads to improved career opportunities and higher salaries.

Starting salaries of program graduates average over $15,000. The work week is usually less than 40 hours with fringe benefits such as medical care, medications and paid health insurance.

ALL STUDENTS MUST HAVE CPR CERTIFICATION — THE COLLEGE OFFERS SUCH CERTIFICATION. CONTACT YOUR DEPARTMENT CHAIRPERSON.

CURRICULUM ADVISORY COUNCIL
MEDICAL ASSISTANT

DR. BRUCE BOWLING — Medical Advisor, Endwell Primary Care Affiliates
THOMAS BIELEFELDT — Exec. Director, Medical Societies of Broome, Chemung, Delaware and Otsego Counties
BONNIE LOU DEISTER, BSN, RN, CMAC — Chairperson, Broome Community College Medical Assistant Department
PHYLLIS DEVINE — CMA Medical Assistant Graduate
M. ELLEN DONOVAN — R.N. Medical Assistant, Chenango Bridge Medical Center
JOSEPH K. GAY — Dean of Health Sciences, Broome Community College
BEA GRACE, R.N. — Endwell Primary Care Affiliates
DEMETRIO A. PEGUERO, M.D. — IBM Medical Administration Dept.
DIANA PIGOS, C.M.A. — Medical Assistant Graduate
RICHARD C. RONEY — Vice President, Key Bank of Central New York
STUDENTS — appointed annually

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
BIO 131	Human Biology I	3	2	4
ENG 110	Written Expression I	3	0	3
MDA 102	Medical Assisting Science	2	0	2
MDA 104	Keyboarding and Medical Word Processing	0	4	2
MDA 114	First Aid & Personal Safety: Management of Emergencies	0	2	1
MRT 106	Medical Terminology	3	0	3
		11	8	15
Spring Semester				
BIO 132	Human Biology II	3	2	4
MDA 115	Mecial Assisting Procedures I	3	2	4
MDA 106	Medical Correspondence and Communications	0	4	2
SOC 110W	Introduction to Sociology	3	0	3
CST 105	Understanding Computers	2	2	3
		11	10	16
SECOND YEAR				
Fall Semester				
MDA 206	Medical Office Management	3	3	4
MDA 208	Medical Ethics, Law and Economics	3	0	3
MDA 201	Medical Assisting Prodecures II	2	4	4
PSY 110W	General Psychology	3	0	3
BUS 102	Payroll Accounting	2	0	2
BUS 108	Accounting for a Service Business	2	0	2
		15	7	18
Spring Semester				
MDA 211	Medical Assisting Procedures III	2	4	4
MDA 245	Directed Practice & Seminar	1	16	5
MDA 210	Pharmacology	2	0	2
ENG 220	Communicating About Values	3	0	3
		8	20	14

W - Writing Emphasis Course

GRADUATION REQUIREMENTS: 63 CREDITS

MEDICAL LABORATORY TECHNOLOGY

DEPARTMENT CHAIRPERSON, Julia Peacock
Titchener Hall, Room 221
Telephone 778-5000 ext. 5211

Medical Technology is a health profession which combines the best of several worlds. In this field, the basic sciences of Biology and Chemistry are merged with Medicine. Medical Technologists and Medical Laboratory Technicians perform biological tests in search of diagnostic clues as evidence of health or disease.

In the search for data on a patient's health, people working in this field may examine specimens through a microscope or perform, for example, the tests necessary to match a donated unit of blood to a patient in need of that unit. Or, they may identify the microorganisms associated with health and disease. They are also competent operators of the computers and complex electronic instrumentation which are used in most areas of today's laboratories.

Although they usually spend less time with patients than physicians and other health professionals, the Medical Technologist and Technician play a vital role in patient care. In many laboratories, the Medical Technologist and Technician performs the full range of laboratory testing in all six major areas of the laboratory, which are Hematology, Immunology, Microbiology, Body Fluids, Blood Banking, and Chemistry. In other laboratories, the technologist or technician can choose to "specialize" or concentrate study and work in only one of the areas listed.

While entry to the field may be accomplished at the Medical Laboratory Technician (AAS Degree) level, a technician may choose to continue to advance, by education or experience, to the BS level, as a Medical Technologist, or as a specialist in any area they choose. Because of this diversity, many technicians find advancement in their profession well within their grasp.

Approximately two-thirds of practicing technologists work in hospital laboratories. Others are employed in physicians offices, clinics, commercial firms such as pharmaceutical companies, all types of research facilities, the armed forces, public health centers and in veterinary clinics. Many are teachers or serve in managerial positions. Still others are representatives for commercial suppliers or work in product development for those companies.

Wherever they work, the technicians and technologists in this field share a strong desire to help others, a love of challenge and responsibility, and the ability to complete a wide variety of scientific tests accurately and reliably.

This program is accredited by the Committee on Allied Health Education and Accreditation (CAHEA), as recommended by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Pre-admission advisement is recommended.

CURRICULUM ADVISORY COUNCIL
MEDICAL LABORATORY TECHNOLOGY

MAXIMILLIAN BORSKI — Medical Laboratory Technology, Broome Community College
PAUL ENGINERI — United Health Services
GEOFFREY FIDELMAN — Alumnus
EDWARD FITZGERALD — St. Joseph's Hospital, Elmira, NY
BRENDAN FLYNN — Chemistry Department, Broome Community College
CAROLYNN FULLER — Arnot Ogden Medical Center, Elmira, NY
JOSEPH K. GAY — Dean of Health Sciences, Broome Community College
MARY GREENE — Our Lady of Lourdes Hospital
PATTI HART — Student
ROBERT LEVIN — Norwich-Eaton Pharmaceutical Company
HARRIET B. MARK — SUNY-Health Science Center at Syracuse
JULIA PEACOCK — Chairperson, Medical Laboratory Technology, Broome Community College
WILLIAM TROLIO — Mary Imogene Bassett Hospital, Cooperstown, NY
DAVID WALSH — Biological Sciences, Broome Community College
JOHN WALTERS — United Health Services
BARRY WINTER — Cortland Memorial Hospital, Cortland, NY
DR. LOREN WOLSH — United Health Services

Medical Laboratory Technology — Curriculum Requirement

The following coursework must be successfully completed to earn the A.A.S. degree in Medical Laboratory Technology:

			Hours per Week Class	Lab	Credits
General Education Requirements:*					
ENG	110	Written Expression	3	0	3
LIT	200	Introduction to Literature, or Equivalent	3	0	3
		Social Science Elective..	6	0	6
Math Requirement:					
MAT	125	Statistics I Using Computers	3	1	3
Chemistry Requirements:					
CHM	145	Chemistry	3	3	4
CHM	146	Chemistry	3	3	4
CHM	133	Survey of Organic Chemistry	3	4	4
CHM	220	Introduction to Instrumental Analysis	1	3	2
Biology Requirements:					
BIO	131	Human Biology I	3	2	4
BIO	132	Human Biology II	3	2	4
Medical Laboratory Technology Requirements:					
MLT	110	Introduction to Medical Laboratory Technology	1	0	1

			Hours/Day Class	Lab	Prac. Hours	No. of Weeks	Credits
MLT	201	Hematology/ Coagulation	2	4	0	3	3
MLT	201P	Hematology/ Coagulation Practicum	0	0	30	3	3
MLT	202	Urinalysis/Body Fluids	2	4	0	1	1
MLT	202P	Urinalysis/Body Fluids Practicum	0	0	40	1	1
MLT	203	Microbiology	3	3	0	5	6
MLT	203P	Microbiology Practicum	0	0	40	2	2
MLT	204	Phlebotomy	0	0	38	N/A	1
MLT	205	Immunology	4	2	0	2	3
MLT	205P	Immunology Practicum	0	0	35	0	1
MLT	206	Immunohematology	2	4	0	2	2
MLT	206P	Immunohematology Practicum	0	0	35	0	2
MLT	207	Clinical Chemistry.	2	4	0	5	5
MLT	207P	Clinical Chemistry Practicum	0	0	35	3	3

All classes, laboratories, and practicum sessions in the 200 level MLT courses listed above meet every school day for the number of weeks indicated. Practicum courses will be in affiliated hospitals. One group of students takes the group of courses listed immediately above in the fall and those far above in the spring. Another group will take the courses far above in the fall and those immediately above in the spring.

Graduation Requirements: 71 Credits

*At least one "W" emphasis course and one designated "Civic Education" course must be completed.

MEDICAL RECORD TECHNOLOGY

DEPARTMENT CHAIRPERSON, Mary Rosato
Business Building, Room 031
Telephone 778-5000 ext. 5051



A medical record is the permanent report of a person's illness or injury kept to preserve information of medical, scientific and legal value. The record includes all medical reports which describe how the patient's illness was diagnosed and treated. Medical records are needed to help doctors diagnose and treat future illness, to verify insurance claims, to plan hospitals, to inform the public health officials, and to aid researchers.

The medical record technician works in the medical record department of a hospital, clinic, nursing home, school of veterinary medicine or other health facility and is responsible for many aspects of preparing, analyzing and preserving health information needed by the patients, by the hospital and by the public. The duties include reviewing medical records for completeness and accuracy and also translating diseases and operations into the proper coding symbols.

Other duties include filing medical records, preparing records for microfilm, typing reports of operations, X-rays and laboratory examinations, as well as histories, physical examinations and discharge summaries, compiling statistics of many kinds, assisting the medical staff by preparing special studies and tabulating data from records for research. Supervising the day-to-day operation of a medical record department, taking records to court and maintaining the flow of the total work picture.

Practice in the college medical record laboratory as well as in medical records departments of cooperating hospitals and other health care facilities, either within or outside the area, provides opportunities for additional educational experience which is the vital core of the program.

This curriculum is accredited by the Committee on Allied Health Education and Accreditation of the American Medical Record Association. Students in this program are eligible to take the Medical Record Accreditation Examination following graduation and upon completion receive the title of Accredited Record Technician (ART). Salaries for 1987 graduates ranged from $13,488 to $15,500 with an average of $13,942. Graduates can continue medical record education toward a baccalaureate degree at four-year colleges.

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
BIO 131	Human Biology I	3	2	4
ENG 110	Written Expression I	3	0	3
MRT 101	Medical Record Science I	3	0	4
MRT 101L	Medical Record Science I Lab	0	2	0
MRT 106	Medical Terminology	3	0	3
CST 105	Understanding Computers	2	2	3
		14	6	17
Spring Semester				
BIO 132	Human Biology II	3	2	4
MRT 107	Medical Transcription	2	2	3
MRT 110	Medical Record Science II	3	0	4
MRT 110L	Medical Record Science II Lab	0	3	0
— —	Social Science Electives	6	0	6
		14	7	17

Summer Term
MRT 144 Directed Practice — 40 Hours per week for 2 weeks — 2 Credits

SECOND YEAR				
Fall Semester				
BIO 140	Pathophysiology	3	0	3
MRT 202	Medical Record Science III	3	0	4
MRT 202L	Medical Record Science III Lab	0	2	0
MRT 214	Alternate Classification Systems	1	2	2
MRT 222	Medical Legal Aspects	3	0	3
ENG 220	Communicating About Values	3	0	3
		13	4	15
Spring Semester				
MRT 210	Medical Record Science IV	3	0	4
MRT 210L	Medical Record Science IV Lab	0	2	0
MRT 295	Medical Record Seminar	2	0	2
MRT 236	Quality Assurance	2	2	3
*MRT 245	Directed Practice	0	40	6
		7	44	15

*This course is conducted in a six-week block time frame. Students will be in a participating facility 5 days a week/8 hours a day.

GRADUATION REQUIREMENTS: 66 CREDITS

CURRICULUM ADVISORY COUNCIL
MEDICAL RECORD TECHNOLOGY

JAMES BRADEN — Director, Medical Records, United Health Services
MARY CASTERLINE, A.R.T. — Director, Medical Records, Willow Point Nursing Home
DOROTHY ERNEY, R.R.A. — Director, Medical Records, Binghamton Psychiatric Center
JOSEPH K. GAY — Dean of Health Sciences, Broome Community College
DR. ALFRED PETERSON — Chenango Bridge Medical Group
HAROLD SIEFERT — Vice President of Finance, Our Lady of Lourdes Hospital
SANDRA THOMPSON, R.R.A. — Director of Medical Records Our Lady of Lourdes Hospital
ARLENE TROWBRIDGE, A.R.T — Assistant Director of Medical Records Moses Taylor Hospital, Scranton, PA
STUDENT — appointed annually

NURSING

DEPARTMENT CHAIRPERSON, Claire Ligeikis-Clayton
901 Front Street
Telephone 778-5000 ext. 5060

Broome Community College offers a two-year, college-based curriculum to prepare graduates for immediate entrance into the first level of registered nursing. Graduates of this curriculum are eligible to take the licensing examination for registered nurses. They are qualified for immediate employment in long term or acute nursing care, or they may wish to continue their education for the baccalaureate and higher degrees in the nursing field. The 1991 graduates of this program averaged $23,467 in their starting salaries, which ranged from $18,737 to $29,640.

The curriculum operates as a college program, with classes and laboratories held on the campus. Clinical instruction is in the affiliating hospitals and nursing homes of the Triple Cities. The clinical experiences, which are an integral part of the Nursing curriculum, include caring for individuals in all age groups, as well as observation periods in community health and social agencies. Grading in the extended campus laboratory is on a satisfactory/unsatisfactory basis.

Enrollment in the Nursing curriculum requires that each student have a health form completed annually and submitted to the Department Chairperson prior to the first clinical assignment.

Mature men and women are encouraged to enter this program along with recent high school graduates.

LPNs may challenge the majority of nursing courses. BCC Nursing Department also has articulation agreements with a variety of Bachelor of Science Nursing Schools which makes transfer into these programs a smooth transition.

This program is accredited by the National League for Nursing.

ALL STUDENTS MUST HAVE CPR CERTIFICATION (BASIC LIFE SUPPORT) Recertification is required annually. — THE COLLEGE OFFERS SUCH CERTIFICATION. CONTACT YOUR DEPARTMENT CHAIRPERSON.

NOTE: Before enrolling in professional nursing courses students will be required to take a Nursing Math placement exam. Based on results of this exam, students may be placed in a nursing math course concurrent with ADN 100. Thereafter, each student enrolled in Nursing is expected to meet mathematics proficiency requirements.

CURRICULUM ADVISORY COUNCIL
NURSING

ANTHONY DISSER — VP Nursing - United Health Services
CHRISTINE ENGLISH — Student of BCC Nursing Program
JOSEPH K. GAY — Dean of Health Sciences - Broome Community College
ANASTASIA KALECHITZ — Graduate of BCC Nursing Program
ROBERTA KRAGER — Supervising Public Health Nurse Home Health Services, Broome County Health Dept.
MARY LAWLER — Director of Nursing - Ideal Living Center
J. PATRICIA LEE — BCC Nursing Faculty - Broome Community College
CLAIRE LIGEIKIS - CLAYTON — Chairperson, BCC Department of Nursing, Broome Community College
JOANN MANIAGO — Consumer of Health Care
BARBARA RIDER — Director of Nursing - Binghamton Psychiatric Center
BLENDA SMITH — SUNY Binghamton - Nursing Faculty

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
*ADN 100	Meeting Basic Human Needs	4	6	6
BIO 131	Human Biology I	3	2	4
PSY 110	General Psychology	3	0	3
ENG 110	Written Expression	3	0	3
		13	8	16
Spring Semester				
*ADN 102	Meeting Mobility Needs	3	6	5
ADN 103W	Nursing Issues[1]	2	0	1
ADN 298	Nursing Seminar III[4]	(1)	0	(1)
BIO 132	Human Biology II	3	2	4
PSY 210W	Developmental Psychology	3	0	3
——	Social Science Elective	3	0	3
		14	8	16
SECOND YEAR				
Fall Semester				
*ADN 204	Regulatory Concepts	3	4.5	4.5
*ADN 205	Psychological Concepts I	3	3	4
*ADN 210	Family Centered Maternity Nursing	3	4.5	4.5
ADN 298	Nursing Seminar III[4]	(1)	0	(1)
——	Elective (to be approved by Department Chair)	3	0	3
		12	12	16
Spring Semester				
*ADN 206	Concepts of Obstruction & Inflammation	3	4.5	4.5
*ADN 207	Oxygenation Concepts	3	4.5	4.5
*ADN 208	Psychological Concepts II	3	3	4
ADN 297	Nursing Issues II	2	0	1
ADN 298	Nursing Seminar III[4]	(1)	0	(1)
ENG 220	Communicating About Values	3	0	3
		14	12	17

*Clinical components run concurrently with lecture. In order to progress, students must pass a selected clinical component with each theory course.

Notes:

1. In order to progress, students must complete assignments in the nursing skills center. Nursing skills center assignments are completed outside of class and clinical times.
2. Each student enrolled in Nursing is expected to meet the mathematics proficiency requirement.
3. Clinical experiences for Nursing students may be scheduled during evening hours on their regular extended campus lab days.
4. ADN 298, Nursing Seminar III, is required of all returning, transfer and challenge students.
5. The Nursing program must be completed in 4 academic years.
6. The State Education Department regulations specify that to be licensed as a registered professional nurse in New York State, an applicant:
 a) does not need to be a United States citizen.
 b) needs to be of good moral character as determined by the New York State Education Department.
7. ADN 100, 102 and 103 meet one "W" required course. Those students who challenge ADN 100 and 102 must make this requirement up in a different manner.

W - Writing Emphasis Course

GRADUATION REQUIREMENTS: 65 CREDITS

PHYSICAL THERAPIST ASSISTANT

DEPARTMENT CHAIRPERSON, Nancy W. Waterman, PT
Titchener Hall, Room 221
Telephone 778-5000 ext. 5211

The Physical Therapist Assistant is a skilled health technician who works under the supervision of a Physical Therapist. A planned patient care program is carried out by the assistant following established procedures. The extent to which the PTA is involved in treatment depends upon the policies of the facility of employment, the supervising therapist and the patient. Patients include people of all ages who are disabled by illness or accident or who were born with a handicap.

Treatments given by the PTA include exercises for increasing strength, endurance, coordination and range of motion; the use of heat, cold, electricity, sound and water to relieve pain and stimulate muscle activity; instruction in activities of daily living and the use of assistive devices such as walkers, crutches and wheelchairs. The PTA also assists the PT in performing tests, evaluations and complex treatment procedures as well as observing and reporting patient responses to treatment. The work setting may be hospital, nursing home, rehabilitation center or any other facility or area of practice where there is a supervising PT available.

The employment outlook for the PTA is excellent with salary levels that are competitive with or above that of the average community college graduate. At the present time there is a severe shortage of PT personnel nationwide and this shortage is expected to remain for some time to come.

The Physical Therapist Assistant program at Broome Community College is not designed as a transfer program to an upper division physical therapy program. However, if combined with an additional year of successful study in the liberal arts and sciences it may serve as a more reliable vehicle for gaining entry into that highly competitive arena. The program consists of four semesters and one summer term after the second semester. All clinical skills laboratories that are part of the professional course work are graded on a pass/fail basis. All graduates will be licensed to practice as a Physical Therapist Assistant by the State of New York upon application and the payment of required fees. There is no licensing examination.

Clinical education is a necessary component of the program and is initiated after the second semester. Because of the need to schedule large blocks of time for the clinical education courses it may not be possible for students to pursue this program of study on a part-time basis after the second semester's work is completed. In addition, students may be required to travel some distance from home to meet this obligation.

Thirty five hours of volunteer work in a facility providing Physical Therapy are required prior to enrollment in PTA Courses.

CURRICULUM ADVISORY COUNCIL
PHYSICAL THERAPIST ASSISTANT

SUSAN BAKKEN, PT — Project Leader, Reconstructive Surgery Department - Binghamton General Hospital, Binghamton, New York
MARTHA GERTY, PT — Broome Developmental Center, Binghamton, New York
DENISE JOHNSON, R.N. — Administrator - Vestal Nursing Center, Vestal, New York
SALLY SPALIK, PTA — Our Lady of Lourdes Memorial Hospital, Binghamton, New York
SUSAN RENDSBURG, PT — Rehabilitation Services, Inc., Binghamton, New York
MICHELE WILLIAMS — Head PT - Outreach Clinic of Lourdes Mem. Hospital, Endwell, New York
CHARLES CROLL, MA — Professor of Social Science - Broome Community College, Binghamton, New York
MARY MORE, MSN. — Assoc. Prof. Nursing - Broome Community College, Binghamton, New York

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
BIO 131	Human Biology I	3	2[6]	4
ENG 110	Written Expression	3	0	3
PSY 110	General Psychology	3	0	3
PTA 100	Introduction to Physical Therapy I	3	0	3
PHY 118	Physics for Physical Therapist Assistants	3	2	4
		15	4	17
Spring Semester				
BIO 132	Human Biology II	3	2	4
PSY 210	Developmental Psychology	3	0	3
PTA 101	Introduction to Physical Therapy II	3	0	3
PTA 102	Introduction to Rehabilitation	3	3	4
PTA 103	Physical Agents and Massage	3	3	4
PTA 105	Certified First Responder Course[1] (one 40 hr. wk.)			1.5
		15	8	19.5
SUMMER TERM I				
PTA 110C	Clinical Affiliation[2]	0	30	2
	3 wks./5 days per or 5 wks./3 days per	0	30	2
SECOND YEAR				
Fall Semester				
PTA 201	Kinesiology	3	3	4
PTA 202	Therapeutic Exercise	3	3	4
PTA 210C	Clinical Affiliation[2]	0	12	4
ENG 220	Communicating About Values	3	0	3
		9	18	15
Spring Semester				
PTA 213	Senior Seminar[3]	9-12	0	5
PTA 220	Clinical Affiliation[5]	0	40	6
PTA 224	Senior Seminar II[4]	9-12	0	1
— —	Elective from Civic Education "W" Course offerings[3]	3	0	3
		9-15	40	15

Notes:

1. This course is conducted in a one-week block the end of Spring semester.
2. See the course description for clinical affiliation coursework.
3. These courses are conducted in a seven-week block at the beginning of the semester.
4. This course is conducted in a two-week block at the end of the semester.
5. This course is a full-time clinical experience for six weeks and may be at an out-of-town location. Students are responsible for their own transportation and housing arrangements.
6. PTA students must enroll in a special lab which includes additional hours.

GRADUATION REQUIREMENTS: 68.5 CREDITS

A minimum grade of C in each PTA course is required in order for a student to progress in the PTA curriculum.

RADIOLOGIC TECHNOLOGY

DEPARTMENT CHAIRPERSON, Nancy Button
Business Building, Room 023
Telephone 778-5000 ext. 5070

Radiologic Technology is a diverse profession. The radiographer must draw from the fields of communication, psychology, photography and the physical and biologic sciences, while utilizing an investigative approach to perform the daily tasks. Radiographers are in demand in nearly every community - in hospitals, physicians' offices, clinics, government, education, industry and research.

The typical role of the radiographer consists of producing radiographs used in the diagnosis of disease and injury. In producing radiographs, the radiographer operates x-ray equipment, provides patient care, provides radiation protection, positions the patient for the examination, selects technical factors for radiographic quality, produces and processes radiographs, maintains quality control and also maintains patient records. Other duties include use of mobile X-ray equipment in the operating room, emergency room and at the patient's bedside.

A radiographer may continue education in areas such as ultra sound, nuclear medicine, special radiographic procedures, Computed Tomography (CT), Magnetic Resonance Imaging (MRI), departmental administration, research, education and radiation therapy.

The Radiologic Technology program at Broome Community College consists of two years of combined academic and clinical education, the equivalent of 24 calendar months. Clinical education is provided in one of our cooperating hospitals. Based on a 40 hour/week schedule, students spend approximately one-third of their time in professional and general education courses at the college. The remaining two-thirds is spent in the college laboratory or in the hospital, obtaining a complete range of supervised clinical experiences including new imaging modalities.

The clinical experience is a viable part of the educational process. Upon completion of the required hours of clinical practice as well as the academic requirements of the program, the graduate is eligible to sit for the examination of the American Registry of Radiologic Technologists for certification and New York State licensure.

The curriculum is accredited by the Committee on Allied Health Education and Accreditation.

Starting salaries for the 1987 graduates ranged between $14,859 and $26,686, with an average of $20,011.

ALL STUDENTS MUST HAVE CPR CERTIFICATION - THE COLLEGE OFFERS SUCH CERTIFICATION. CONTACT YOUR DEPARTMENT CHAIRPERSON.

CURRICULUM ADVISORY COUNCIL
RADIOLOGIC TECHNOLOGY

ANDREW ADAMS, M.D. — Medical Advisor - Binghamton, NY
THOMAS CARPENTER (R) — Our Lady of Lourdes Hospital - Department of Radiology
DAVETTE CUMMINGS, R.T. (R) — Wilson Memorial Hospital, Department of Radiology
FRANK EMICK, R.T. (R) — Binghamton General Hospital, Department of Radiology
NANCY BUTTON, R.T. (R) — Chairperson, Radiologic Technology Department, Broome Community College
JULIE A. DANTINI — Director of Counseling - Office for Vocational & Educational Services for Individuals with Disabilities
ROBERT KNACK, M.D. — Our Lady of Lourdes Hospital - Department of Radiology
EDWIN LIS — Radiology Business Manager, Wilson Memorial Hospital
DAVID LISI, M.D. — Binghamton General Hospital
DOUGLAS ROBERTSON, R.T. (R) — Mary Imogene Bassett Hospital, Department of Radiology
DANIEL WENCK, R.T. (R) — Mary Imogene Bassett Hospital, Department of Radiology
BRIAN WETZEL, R.T. (R) — Wilson Memorial Hospital
SHAWN ZYCH, R.T. (R) — Supervisor - Our Lady of Lourdes Hospital, Department of Radiology
STUDENTS — appointed annually

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
BIO 131	Human Biology	3	2	4
ENG 110	Written Expression I	3	0	3
RAD 100	Introduction to Radiologic Technology	3	0	3
RAD 101	Radiologic Technology I	3	1	3
RAD 103	Positioning I	0	6	2
RAD 110	Patient Care	1	1	1
		12	10	16
WINTER TERM I				
*RAD 131	Clinical Education I	(40 hours per week)		
Spring Semester				
BIO 132	Human Biology II	3	2	4
SOC 110	Intro. to Sociology	3	0	3
PHY 121	Physics for Radiographers	3	2	4
RAD 102	Radiologic Technology II	3	1	3
RAD 104	Positioning II	0	3	1
RAD 132	Clinical Education II	0	16	2
		12	24	17
SUMMER TERM I				
*RAD 131	Clinical Education III	0	40	3
SECOND YEAR				
Fall Semester				
PSY 110	General Psychology	3	0	3
RAD 204	Advanced Positioning	0	3	1
RAD 201	Radiologic Technology	3	0	3
RAD 230	Clinical Education IV	0	16	2
ENG 220	Communicating About Values	3	0	3
CST 105	Understanding Computers	2	2	3
		11	21	15
WINTER TERM II				
*RAD 231	Clinical Education V	(40 hours per week)		
RAD 216	Imaging Modalities	1	0	1
Spring Semester				
RAD 225	Special Radiographic Procedures	3	0	3
RAD 220	Radiologic Pathology	2	0	3
RAD 232	Clinical Education VI	0	24	3
RAD 245	Radiobiology	2	0	2
RAD 250	Image Assessment	2	1	2
RAD 295	Seminar in Radiography	2	0	2
		12	25	15
SUMMER TERM II				
*RAD 233	Clinical Education VII	0	40	3

***Successful achievements is a GRADUATION REQUIREMENT**

GRADUATION REQUIREMENTS: 70 CREDITS

DIVISION OF LIBERAL AND GENERAL STUDIES

DIVISION DEAN, George Higginbottom
Titchener Hall, Room 121
Telephone 778-5000 ext. 5031

One of four academic divisions of the college, Liberal and General Studies has several important functions. First, it offers traditional university-parallel programs_the Associate in Arts and the Associate in Science_to students aspiring to baccalaureate degrees. Graduates transfer to institutions throughout the SUNY system and to public and private colleges in New York and other states.

Second, Liberal and General Studies sponsors a variety of career-oriented programs whose curricular requirements and whose knowledge bases are closely connected with liberal arts subjects. These include Communication and Media Arts, Mental Health (Counseling Psychology and Social Work), Criminal Justice, Early Childhood, Paralegal, and Fire Protection Technology. Several of these degree programs and concentrations are in helping professions commonly referred to as "human services." Additionally, mature students wishing to pursue career goals or academic interests which cannot be accommodated in standard programs can opt for an Individual Studies (AS) degree program. Examples would be pre-architecture, music and music education, interior design and design arts, etc.

As its third major responsibility, Liberal and General Studies provides leadership in setting the standards for "general" education, the learning objectives shared by students in all of the college's curricula. (see page 25)

Profiles of each of the division's sponsored programs, together with advisement and career preparation information, follow.

ACADEMIC ADVISEMENT

FULL-TIME STUDENTS

Every full-time student is assigned a faculty advisor. All students are required to complete with their advisors a Degree Advisement Contract prior to each semester's registration. Its purpose is to monitor the student's progress toward the degree.

The divisional office staff is available to deal with special problems relating to academic requirements. While the faculty and staff will make every reasonable effort to help students with academic planning, students must also assume responsibility for their programs, and particularly, in familiarizing themselves with degree requirements.

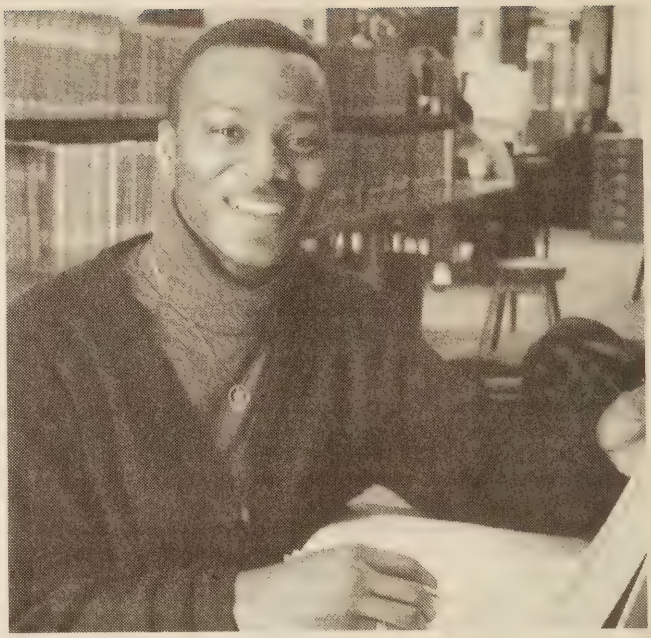
PART-TIME STUDENTS

Part-time day students who intend to matriculate in a degree program sponsored by the division should come to the office (Room 121 in Titchener Hall) to be assigned academic advisors. Students not interested in

a degree, but merely seeking academic advice, may do so in the Liberal Arts Office. Part-time evening students will be advised by a divisional representative who works closely with personnel who staff the Student Information Center, Room 101 of the Library.

COMMUNICATION WITH STUDENTS

The division maintains bulletin boards in the Titchener Hall lobby and outside the office in Titchener Hall, Room 121. Students are urged to check the boards regularly for information pertaining to academic advisement, career planning, cultural events, transfer opportunities, convocations and lectures, concerts, and the like. Important notices and messages for students will also be posted. **Check the boards!**



ACADEMIC PROGRAMS LIBERAL ARTS AND SCIENCES

The Liberal and General Studies curriculum is mainly a two-year university-parallel program designed for those who wish to continue their college education at a four-year school. Graduates of the College in its Liberal Arts program receive either the Associate in Arts or Associate in Science degrees, depending on which course of study they complete.

Students completing this curriculum, its science option or its other emphases, will have a breadth of education that prepares them for many professional careers. The Science Option, for example, is excellent for those planning careers in forestry, chemistry, biology or medicine. Those aspiring to careers in the various professions will find alternatives in the Liberal and General Studies curriculum designed especially for them.

Students should be aware that many of these alternative curriculums presume a high level of preparation in the secondary school, and they should consult with faculty advisors or counselors when there is doubt about the adequacy of their pre-college academic background.

Prospective academic majors in the humanities, social sciences, biological sciences and physical education are also taught and advised by divisional faculty and staff. (Refer also to the Career Models on pages 59-61 and General Education requirements on page 25.)

ASSOCIATE IN ARTS DEGREE

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

	Credits Required
English	6
ENG 110 Written Expression I and ENG 220 Communicating About Values	
History	6
HIS 115 Modern Global History plus one other history (HIS) course.	
Mathematics or elective (as advised)	0-8
Students who have completed fewer than 3 units of secondary school mathematics (through Intermediate Algebra or "Course III")* are required to take a minimum of 2 semesters of college level mathematics. Students who have completed 3 units of secondary school mathematics (through Intermediate Algebra or "Course III") are required to take one semester of college level mathematics. Students who have completed more than 3 units of secondary school mathematics (including Intermediate Algebra or "Course III") are not required to take additional mathematics. They may, however, elect an appropriate math course or an elective in another field.	
Laboratory Science	8
A full-year sequence of Biology, Chemistry, Physics or Physical Science. Acceptable sequences: BIO 111-112 General Biology I and II; BIO 131-132 Human Biology I and II; BIO 150-151 Microbiology and Aquatic Biology; CHM 141-142 General Chemistry; CHM 145-146 Chemistry; PHY 161-162 Physics; PHS 113, 114, 115, 116 or 215 Physical Science (any 2).	
Philosophy or Foreign Language Sequence	6-8
Students are encouraged to take both, but they must complete a year (6-8 credits) of either a philosophy or a foreign language sequence.	
Physical Education	2
No more than 2 credits can be used to fulfill degree requirements. At least 1 credit from PED 118, 119, 127, 135, 137, 143, 144, 146, 147, 148, 173.	
Literature	6
Two (2) LIT electives.	
Social Science	6
Courses from the following disciplines: anthropology, economics, geography, political science, psychology, sociology, social sciences. These have ANT, ECO, GEO, POS, PSY, SOC, SOS designators. At least 3 credits must be from the following courses: ECO 110/111, HIS 130/131, SOC 110/111, SOS 111/120/130, POS 201/204.	
Electives	14-24
Selections from approved listing preceding each semester's registration. Exceptions to receive approval of Dean of the LA Division.	
Total number of credits	**64 minimum**

ASSOCIATE IN SCIENCE DEGREE: SCIENCE OPTION

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

This program is designed for students planning careers in biology and forestry biology, chemistry and forest chemistry, the physical sciences, medicine, dentistry and related fields.

	Credits Required Per Year
FIRST YEAR	
English	3
ENG 110 Written Expression I	
Literature	3
Elective	
History	6
HIS 115 Modern Global History and any other history (HIS) course.	
Mathematics	8
MAT 181 and 182 Calculus with Analytic Geometry I and II, or if a student is not prepared for these courses, he or she may take MAT 139 Algebra and/or MAT 140 Trigonometry or MAT 161 Pre-Calculus mathematics first.	
2 Laboratory Science Sequences	16
BIO 111 and BIO 112 General Biology I and II and CHM 145 and CHM 146 Chemistry for those planning careers in medicine, veterinary medicine, dentistry, forest biology, marine biology, pharmacy or forest chemistry.	
Physical Education	2
A minimum of 1 credit must be taken from PED 118, 119, 127, 135, 137, 143, 144, 146, 147, 148, 173.	
SECOND YEAR	
English	3
ENG 220 Communicating About Values	
Literature	3
LIT elective	
Social Science	6
Courses from the following disciplines - anthropology, economics, geography, political science, psychology, sociology, social science. These have ANT, ECO, GEO, POS, PSY, SOC, and SOS designators. At least 3 credits must be from among the following courses: ECO 110/111, HIS 130/131, SOS 111,120/130, POS 201/204, SOC 110/111	
2 Laboratory Science Sequences	16
PHY 161 and 162 Physics and CHM 245 and 246 Organic Chemistry, for those planning careers in medicine, veterinary medicine, dentistry, forest chemistry, forest biology, marine biology, or pharmacy.	
Mathematics, Philosophy or Foreign Language	6-7
A student must fulfill the mathematics requirements (above) before taking a philosophy or foreign language course. If the student wishes to take a math course more advanced than MAT 182 then he or she with the dean's approval may take another mathematics course. If the math requirement has been completed and the student does not elect to take additional mathematics, then he or she is required to take philosophy or foreign language courses.	
Total number of credits	**72 minimum**

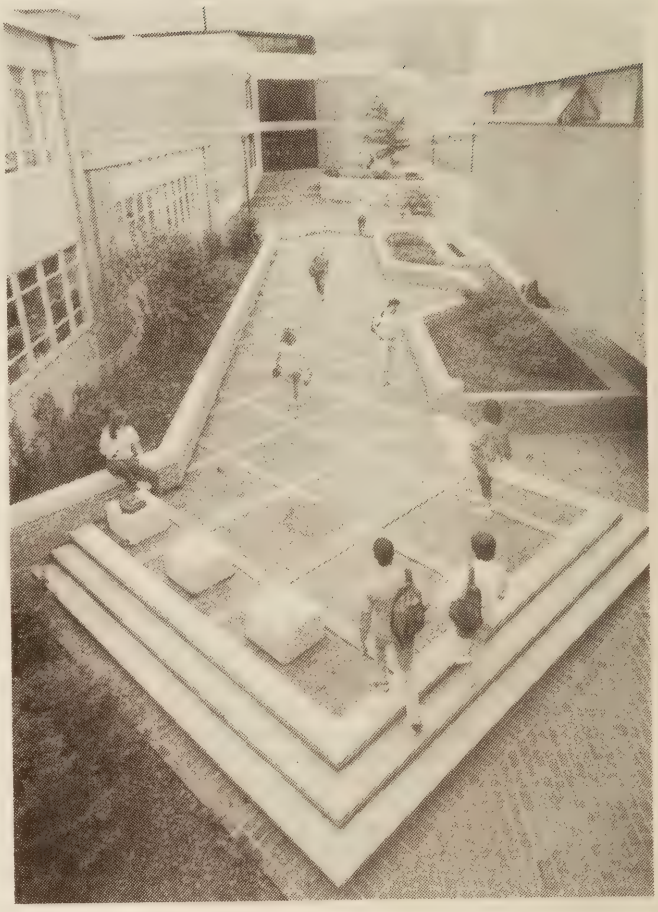
*General Math and Business Math cannot be used in meeting this requirement.

TRANSFER

Students who have earned A.A. or A.S. degrees at Broome Community College and who intend to go on for baccalaureate degrees are guaranteed transfer to some four-year college or university of the State University of New York (SUNY). While transfer students are usually given full junior standing, there is no guarantee that students entering specialized programs can complete all degree requirements in four semesters.

Students are urged to learn as much as they can about program requirements at the institution(s) to which they might transfer. For example, many four-year schools require foreign language. The decision to take a language at Broome Community College might thus be influenced by whether or not it is required at the college to which one intends to transfer.

The Liberal and General Studies Division has in force a number of guaranteed transfer arrangements with public and private colleges. Inquiries about these arrangements should be made in Titchener Hall, Room 121, or the Counseling and Student Development Center, Wales, Room 200.



CAREER PREPARATION

For a great number of careers a broad background in liberal studies, as is presented in the Associate in Arts (AA) and Associate in Science (AS) degree programs, is essential. Students are urged to utilize the college's resources thoroughly, and as early as possible, in locating useful information about their intended academic majors and their career aspirations.

The divisional advisement system is one which aims to match students with advisors who share their interests. If questions pertaining to career preparation, transfer opportunities and job placement cannot be answered by the faculty advisors, students will be directed to others who can. These are elements of our career guidance support system.

Faculty Advisor	Liberal & General Studies Division Office Room T-121	Career Counselor/ Transfer Counselor (Counseling Ctr. Rm. W-200)

To start students thinking about a career and the preparation needed, a number of fields which suggest a liberal studies background are listed below. The college does not offer courses in all these areas, and in some cases the professional courses are taught only at the junior/senior level in baccalaureate programs.

Acting
Advertising
Architecture
Art
Chiropractic
Commercial Art
Communications
Community/Human Service
Counseling
Criminal Justice
Dentistry
Design
Energy Research
Environment
Foreign Service
Forestry
Government Service
Home Economics
Interior Design
International Business
Journalism\
Labor Relations
Law
Management
Library Science
Media Communications
Medicine
Mental Health
Music
Oceanography
Optometry
Paralegal
Personnel
Physical Therapy
Psychologist
Public Administration
Public Relations
Public Service
Publishing
Real Estate
Recreation
Social Work
Scientific Research
Sports Writing
Teaching
Technical Writing
Translating
Urban Planning
Writing/Critic

MODEL PROGRAMS

for Liberal and General Studies Minimum Credit - 64 (Associate in Arts Degree)*

These model programs are designed to help students with identifiable career or academic interests get an early start. All courses in the concentration are lower division offerings. **You are advised to review transfer requirements of a range of baccalaureate granting colleges to ensure that your course selections align with transfer requirements.** Assistance: Room T-121 or the Counseling and Student Development Center.

Students with advanced placement credit and those with 3 1/2 units of academic mathematics will be able to take additional elective courses with their advisor's approval.

Students who enter with academic deficiencies may have to take more than the minimum 64 credits to earn the Associate of Arts degree. For example, students deficient in written communication will take ENG 090 Basic Language Skills before registering in ENG 110.

*All students must meet General Education requirements. (See page 25.)

ART (A.A.)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	ENG 220	(3)
HIS 115	(3)	HIS elective	(3)
LIT elective	(3)	LIT elective	(3)
MAT electives	(0-8)	Laboratory Science Sequence	(8)
Philosophy or Foreign Language *PHI 111 and 112	(6-8)	Social Science electives	(6)
ART electives ART 102, 103, 115, 217 *ART 116, 140	(12)	ART electives ART 215, 216 *ART 105 or 106	(9)
		Physical Ed. electives	(2)
Total	32-35	Total	32

BUSINESS (A.A.)

(For Transfer to Baccalaureate Programs in Business)
This model is appropriate for transfer to SUNY Binghamton School of Management

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	ENG 220	(3)
HIS 115 and elective	(6)	Laboratory Science sequence	(8)
*MAT 124 and 146 or 181	(6-7)	ECO 110 and 111	(6)
LIT elective	(3)	LIT elective	(3)
Philosophy or Foreign Language	(6-8)	Business electives *BUS 210	(4)
Business electives *BUS 100	(4)	*BUS 118	(3)
*BUS 101	(4)	†CST 107	(3)
		Physical Ed. elective	(2)
Total	34-36	Total	32

CIVIL AND PUBLIC SERVICE (A.A)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	ENG 220	(3)
HIS 115 and elective *HIS 131	(6)	Philosophy elective *PHI 206	(3)
Philosophy or Foreign Language	(3-4)	Social Science elective	(3)
MAT electives *MAT 124	(0-6)	*POS 204, SOS 111	
Laboratory Science sequence	(8)	Related electives ECO 110, 111 PSY 110 SOC 110, 111 BUS 100, 245, 249	(20)
Social Science elective *POS 201	(3)		
Physical Ed. electives	(2)		
LIT elective	(3)	LIT elective	(3)
Total	32	Total	32

CRIMINAL JUSTICE (Baccalaureate Transfer Program) (A.A.)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	Laboratory Science sequence *CHM 120 and 121	(8)
HIS 115	(3)	Philosophy or Foreign Language	(6-8)
MAT electives *MAT 124	(6-8)	LIT elective	(3)
LIT elective	(3)	Criminal Justice electives	(9)
POS 201	(3)	ENG 220	(3)
Social Science elective *PSY 110 and SOC 110 or 111	(6)	*SOC 210	(3)
Criminal Justice electives *CRJ 101	(6)		
Physical Ed. electives	(2)		
Total	32	Total	32

CYTOTECHNOLOGY (A.A.)

(For transfer to the SUNY Health Science Center at Syracuse "B" grades in science courses required)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	BIO 131 and 132	(8)
BIO 111 and 112	(8)	LIT elective	(3)
CHM 145 and 146	(8)	Social Science electives	(6)
LIT elective	(3)	Physical Ed. electives	(2)
BIO 150	(4)	Philosophy or Foreign Language	(6-8)
MAT 124	(3)	ENG 220	(3)
HIS 115 and elective	(6)	Elective	(3)
Total	35	Total	31

DESIGN ARTS (A.A.)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	Laboratory Science sequence	(8)
HIS 115 and elective	(6)	LIT elective	(3)
MAT electives	(6-8)	Social Science electives *PSY 110	(6)
Philosophy or Foreign Language *PHI 111 and 112	(6-8)	Design electives *INT 110/111 †ART 115 †ART 150	(12)
Design electives *ART 105, 106, 150 ART 108, 109, INT 105	(6)	ENG 220	(3)
Physical Ed. electives	(2)		
LIT elective	(3)		
Total	32	Total	32

EARLY CHILDHOOD (Pre-School and Day Care (A.A.)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	HIS 115 and elective	(6)
MAT electives	(6-8)	Philosophy or Foreign Language	(6-8)
Laboratory Science sequences *BIO 131/132 or BIO 111/112	(8)	LIT elective *LIT 263	(3)
Social Science *PSY 110 *SOC 111/SOS 111	(6)	Early Childhood electives	(9)
		Free electives †PSY electives †THR or MUS electives	(3-6)
Early Childhood electives *ECE 100	(6)	ENG 220	(3)
Physical Ed. electives	(2)		
LIT elective	(3)		
Total	34	Total	30

ELEMENTARY EDUCATION (Kindergarten to Gr. 6) (A.A.)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT elective	(3)
HIS 115	(3)	ENG 220	(3)
MAT 119 and 120	(6)	Philosophy or Foreign Language *Philosophy 203 and elective	(6)
Laboratory Science sequences	(8)	HIS elective	(3)
LIT elective	(3)	Electives *PSY 210, 211 *ART electives *MUS electives *THR electives	(18)
Social Science electives *PSY 110 *SOC 111/SOS 111	(6)		
PED electives	(2)		
Total	31	Total	33

FOREST RESOURCES MANAGEMENT (A.A.)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
*ENG 110	(3)	Philosophy or Foreign Language	(6-8)
HIS 115 and elective	(6)	ENG 220	(3)
MAT 181	(4)	LIT elective	(3)
		Social Science electives *ECO 110 POS 201	(6)
Laboratory Science sequences *BIO 111 and 112	(8)	Laboratory Science *PHY 161/162	(8)
Physical Ed. electives	(2)	CST 105	(3)
LIT elective	(3)	Free electives †PSY 110, SOC 110, 111 *POS 204, MAT 182 or 124	(3)
*CHM 145 and 146	(8)		
Total	34	Total	32

FOREST TECHNOLOGY

FIRST YEAR Courses	(Credits)	SECOND YEAR (Wanakena)
ENG 110	(3)	
LIT elective	(3)	
MAT 139 and 140	(8)	
ECO 110 or 111	(3)	
BIO 111 and 112	(8)	
Electives *BIO	(6) electives	
Total	31	

INTERIOR DESIGN (A.S.)

FIRST YEAR Courses	(Credits)
ENG 110	(3)
ART 102/103	(6)
ART 105	(3)
Math/Science electives	(8)
INT 110	(4)
INT 105	(3)
Liberal Arts elective	(3)
Social Science elective	(3)
*PSY 110	
Total	33

SECOND YEAR Courses	(Credits)
INT 111	(3)
INT 122	(3)
ART 150	(3)
INT 141	(2)
BUS 262	(3)
ART 108/109	(6)
Social Science elective	(3)
Electives (ART 106)	(3)
ENG 220	(3)
Physical Education	(2)
Total	31

INTERNATIONAL RELATIONS (A.A.)

FIRST YEAR Courses	(Credits)
ENG 110	(3)
Foreign Language	(6)
MAT electives	(0-8)
HIS 115 and elective	(6)
Laboratory Science sequence	(8)
LIT elective	(3)
ANT 111	(3)
PED electives	(2)
Total	34

SECOND YEAR Courses	(Credits)
Foreign Language	(6)
POS 203/SOS 111	(3)
LIT elective	(3)
Electives	(18)
Language	
Business in the Global Environment	
Oriental Art	
History, Social Science	
ENG 220	(3)
Total	33

LANDSCAPE ARCHITECTURE (A.A)

FIRST YEAR Courses	(Credits)
ENG 110	(3)
HIS 115 and elective	(6)
MAT electives	(0-8)
*MAT 139, 140	
†MAT 181, 182	
Laboratory Science sequence	(8)
*BIO 111, 112	
Physical Ed. elective	(1)
ART elective: 102, 105, 108	(6)
Total	32

SECOND YEAR Courses	(Credits)
LIT electives	(6)
CIV 115, CIV 119, or 159	(4)
Social Science electives	(6)
ENG 220	(3)
Philosophy or Foreign Language	(6)
Related courses	(6)
*ART 109	
*CIV 111 *ART 106	
*CST 110	
*PHS 116 *ART 115	
*PHY 161	
Physical Ed. elective	(1)
Total	32

MATH AND MATH EDUCATION (A.A.)

FIRST YEAR Courses	(Credits)
ENG 110	(3)
HIS 115 and elective	(6)
MAT 181/182	(8)
MAT 124/224	(6)
LIT electives	(6)
PHI 202	(3)
PED electives	(2)
Total	34

SECOND YEAR Courses	(Credits)
MAT 281	(4)
MAT 264	(4)
Laboratory Science	(8)
†PHY 161, 162	
Philosophy elective	(3)
MAT 266	(3)
MAT 250 or 282	(4)
Social Science electives	(6)
ENG 220	(3)
Total	32-35

MEDICAL TECHNOLOGY (A.A.)

FIRST YEAR Courses	(Credits)
ENG 110	(3)
BIO 111 and 112	(8)
CHM 145 and 146	(8)
MAT 161 or equivalent	(4)
HIS 115	(3)
LIT elective	(3)
Philosophy or Foreign Language	(6-8)
Total	35

SECOND YEAR Courses	(Credits)
BIO 131	(4)
BIO 150	(4)
CHM 245	(5)
PSY 110	(3)
HIS elective	(3)
ENG 220	(3)
Social Science elective	(3)
CHM 224	(4)
LIT elective	(3)
Physical Ed. electives	(2)
Total	34

PHYSICAL EDUCATION/RECREATION (A.A.)

FIRST YEAR Courses	(Credits)
ENG 110	(3)
HIS 115 and elective	(6)
MAT electives	(0-6)
Philosophy or Foreign Language	(6-8)
PHI 203 and elective	
PED 118 or 119	(1-1½)
Related electives	(9)
*PSY 110	
*ART, MUS, THR, SPK	
Total	32

SECOND YEAR Courses	(Credits)
LIT elective	(6)
Social Science electives	(6)
*SOC 111/SOS 111/SOS 130	
*PSY 210 or 214	
Laboratory Science sequence	(8)
†BIO 111, 112, or 131, 132	
Related electives	(9)
ENG 220	(3)
Total	32

PHYSICAL THERAPY (A.A.)

(For Transfer to SUNY Health Science Center at Syracuse "B" grades in all required courses)

FIRST YEAR Courses	(Credits)
ENG 110	(3)
MAT 161	
(181 recommended)	(4)
BIO 111 and 112	(8)
CHM 145 and 146	(8)
HIS 115 and elective	(6)
LIT elective	(3)
Total	32

SECOND YEAR Courses	(Credits)
PHY 161 and 162	(8)
PSY 110 and 211	(6)
SOC 110	(3)
ENG 220	(3)
Philosophy or Foreign Language	(6-8)
LIT elective	(3)
Physical Ed. electives	(2)
Total	32

PRE-ARCHITECTURE (A.S.)

FIRST YEAR Courses	(Credits)
ENG 110	(3)
PSY 110	(3)
PHY 161/162	(8)
CIV 115	(2)
MAT 181	(4)
ECO 110	(3)
CIV 119	(2)
ART 108/109	(6)
Physical Education	(1)
Total	32

SECOND YEAR Courses	(Credits)
LIT Elective	(3)
ART 105/106	(6)
Social Science elective	(3)
CAD 150	(2)
CAD 205	(3)
CIV 238	(3)
Electives	(12)
PHI 111/112	
CIV, CST, ART	
Physical Education	(1)
Total	33

PRE-LAW (A.A.)

FIRST YEAR Courses	(Credits)
ENG 110	(3)
HIS 115	(3)
MAT electives	(0-8)
Laboratory Science sequence	(8)
Foreign Language or Philosophy	(6-8)
PHI 206, 201, 202	
LIT elective	(3)
PED elective	(1)
ART, MUS, THR	(3)
Total	33

SECOND YEAR Courses	(Credits)
LIT elective	(3)
Social Science electives	(6)
Electives	(18)
POS 201, 204	
ECO 110, 111, 104	
SOC 110, 111, SOS 111	
HIS 130, 131	
PSY 110	
BUS 100	
ENG 220	(3)
HIS elective	(3)
Total	33

PUBLIC HISTORY (A.A.)

FIRST YEAR Courses	(Credits)
ENG 110	(3)
HIS 115 and elective	(6)
MAT electives	(0-8)
*MAT 113/114/124	
Philosophy or Foreign Language	(6-8)
Physical Ed. electives	(2)
Electives	(3-9)
*HIS 175	
*POS 201	
*POS 204	
LIT elective	(3)
Total	32

SECOND YEAR Courses	(Credits)
LIT elective	(3)
*LIT 210, 211, 230	
Social Science electives	(6)
*POS 201, 204	
*PSY 110, SOC 111	
Laboratoy Science sequence	(8)
Electives	(12)
*SOS 111/120	
*HIS 130, 170, 180	
†ECO 110, 111	
ENG 220	(3)
Total	32

SPECIAL EDUCATION (Elementary and Secondary) (A.A.)

FIRST YEAR Courses	(Credits)
ENG 110	(3)
HIS 115	(3)
MAT electives	(6)
*MAT 119, 120, 113, 114	
Laboratory Science sequence	(8)
*BIO 131, 132	
Social Science elective	(3)
*PSY 110	
Philosophy or Foreign Language	(6-8)
*PHI 203	
LIT elective	(3)
Total	32

SECOND YEAR Courses	(Credits)
LIT elective	(3)
ENG 220	(3)
HIS elective	(3)
Social Science elective	(3)
SOC 111/SOS 111	
Physical Ed. electives	(2)
Related electives	(18)
*PSY electives	
*MUS, THR, ART	
*HUS 120	
Total	32

SPECIAL TRANSFER AGREEMENT PROGRAMS

These are special Agreement Programs with other Colleges and Universities in which students spend either their first year or first two years in BCC's Liberal and General Studies program and their last year(s) at another institution.

HUMAN DEVELOPMENT AND FAMILY STUDIES (SUNY College of Human Ecology at Cornell) (A.A.)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT elective	(3)
HIS 115 and elective	(6)	MAT elective	(3)
MAT 124	(3)	PSY 211 and 212	(6)
PSY 110	(3)	Social Science electives	(6)
*BIO 131 and 132	(8)	FREE electives	(9)
Philosophy or Foreign Language	(6-8)	Physical Education	(1)
Physical Education	(1)	ENG 220	(3)
LIT elective	(3)		
Total	33	Total	31

FOREST CHEMISTRY (SUNY College of Environmental Science and Forestry, Syracuse) (A.A. OR A.S.)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
*ENG 110	(3)	LIT elective	(3)
*HIS 115 and elective	(6)	CHM 245, 246	(10)
BIO 111 and 112	(8)	PHY 161, 162	(8)
CHM 145 and 146	(8)	ECO 110	(3)
MAT 181	(4)	Philosophy elective	(3)
Philosophy elective or MAT 182	(3)	Physical Education	(2)
LIT elective	(3)	ENG 220	(3)
Total	35	Total	32

RESPIRATORY THERAPY (1+1) (Transfer to SUNY Health Science Center at Syracuse)

FIRST YEAR Courses	(Credits)	
ENG 110	(3)	— GPA requirement is 3.0 (B)
*HIS 115 and elective	(6)	
Philosophy or Foreign Language	(3)	— Requires also observation or volunteer work in a respiratory therapy setting.
Laboratory Science *BIO 131 and 132	(8)	
MAT elective	(3-4)	
Physical Education	(2)	
LIT elective	(3)	
Total	31	

SOCIAL WORK (SUNY College of Human Ecology at Cornell) (A.A.)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT elective	(3)
*HIS 115 and elective	(6)	Philosophy or Foreign Language	(6-8)
Laboratory Science sequence *BIO 131 and 132	(8)	CST 105 or 115	(3)
		ENG 220	(3)
MAT elective (MAT 124)	(3)	PSY 210, 214	(6)
PSY 110 and SOC 110	(6)	SOC 230	(3)
LIT elective	(3)	Electives ECO 110/111, SOS 111/SOC 111	(9)
Physical Education	(2)		
Total	31	Total	33

ENVIRONMENT AND FOREST BIOLOGY (SUNY College of Environmental Science and Forestry, Syracuse) (A.A. or A.S.)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT elective	(3)
*CHM 145 and 146	(8)	Philosophy or Foreign Language or Math	(6-8)
BIO 111 and 112	(8)	CHM 245 and 246	(10)
MAT 181	(4)	Social Science electives	(6)
HIS 115 and elective	(6)	PHY 161 and 162	(8)
Physical Ed. elective	(2)	ENG 220	
LIT elective	(3)		
Total	34	Total	36-38

CONSUMER ECONOMICS AND HOUSING (SUNY College of Human Ecology at Cornell) (A.A.)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	LIT elective	(3)
*MAT 145 and 146	(6)	ECO 110 and 111	(6)
HIS 115 and elective	(6)	CST 110	(3)
Laboratory Science electives BIO 131/132 or CHM 145/146 or PHY 161/162	(8)	PED	(1)
		POS 201	(3)
Philosophy or Language	(6-8)	BUS 141	(3)
Physical Education	(1)	PSY 110	(3)
LIT elective	(3)	ENG 220	(3)
		SOC 110	(3)
		Free Electives	(3)
Total	34	Total	32-34

Freshman year BCC, Sophomore year at:

DELHI A&T
General Agriculture
Animal Husbandry — Dairy

CANTON A&T
Mortuary Science

WANAKENA
See Forest Technology Model Program

Details in Titchener Hall, Room 121

NURSING (Transfer to SUNY Binghamton's Decker School of Nursing for a B.S. degree)

FIRST YEAR Courses	(Credits)	SECOND YEAR Courses	(Credits)
ENG 110	(3)	ENG 220	(3)
HIS 115 and elective	(6)	BIO 150	(4)
MAT 124	(3)	PSY 110	(3)
CHM 141 and 142	(8)	PSY 210	(3)
BIO 131 and 132	(8)	Philosophy or Foreign Language	(3)
LIT elective	(3)	Social Science elective SOS 111, SOC 110/111, POS 201	(3)
Philosphy or Foreign Language	(3)	LIT elective	(3)
		Electives	(9)
		PED	(2)
Total	34	Total	33

*These courses are "strongly recommended"
†These courses are "recommended"

COMMUNICATION AND MEDIA ARTS

DEPARTMENT CHAIRPERSON, Paul Chambers
Titchener Hall, Room 121
Telephone 778-5000 ext. 5163

PROGRAM COORDINATOR, John Butchko
Titchener Hall, Room 103 Telephone 778-5000 ext. 5101

The Program of instruction in Communication and Media Arts comprises theoretical and practically-oriented course offerings in audio and video production, acting, and various types of written communication. Communications courses emphasize acquisition of both technical proficiency and theoretical knowledge.

The program aims, on the one hand, to prepare graduates for immediate employment in a variety of communications-related occupations, and on the other hand, for transfer to Baccalaureate programs.

Graduates entering the job market after earning the associate degree will seek employment as audio-visual coordinators, educational media technicians, media sales representatives, writers, and actors.

Those transferring to upper division colleges will major in audio-visual technology, film and photography, technical communications, radio and TV broadcasting, journalism, graphic reproduction, acting and advertising. Subsequently, they will seek employment as photographers, filmmaker/cinematographers, scriptwriters, media producers, broadcasters, newspaper reporters, studio technicians, instructional media specialists, video and audio engineers, copy writers, media directors, actors and actresses production media specialists, and sales or marketing managers.



Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

COMMON FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
ENG 110	Written Expression I	3	0	3
PHI	or Foreign Language	3 (4)	0	3 (4)
COM 100	Intro to Mass Media	3	0	3
COM	Elective ART 112 - Intro to Photography COM 125 - Intro to Audio COM 130 - Intro to Video THR 140 - Presentation for Radio/TV	3	0	3
MAT	Mathematics Elective	3	0	3
†PED	Phys. Ed. Elective (THR 165)	0	2	1
		15 (16)	2	16 (17)
Spring Semester				
SOS 155W	Media and Society	3	0	3
HIS 115	Modern Global History	3	0	3
——	Elective COM 110, COM 125, COM 130, LIT 230*, or LIT 233*	3	0	3
——	Science Elective	3 (4)	0-1	4
——	Elective in Art/Music Theater or Foreign Language	3 (4)	0	3 (4)
†PED	Phys. Ed. Elective (THR 175)	0	2	1
		16 (17)	2	17 (18)

* for Acting Option

†A minimum of 1 credit must be taken from PED 118, 119, 127, 135, 137, 143, 144, 146, 147, 148, 173.

SECOND YEAR A.S. DEGREE

ACTING

Fall Semester		Hours per Week Class	Lab	Credits per Semester
COM 220W	Image Theory	3	0	3
CST 105	Understanding Computers	3	0	3
THR 140	Presentation for Radio and Television	3	0	3
THR 266	Acting for Television Film and Commercials	3	0	3
THR	Elective Acting or Directing Course	3	0	3
		15	0	15
Spring Semester				
COM 115	Writing for the Media	3	0	3
ENG 220	Communicating About Values	3	0	3
— —	Social Science Elective	3	0	3
THR 276	Rehearsal and Performance for TV	3	0	3
THR	Elective Acting or Directing Course	3	0	3
		15	0	15

SECOND YEAR A.S. DEGREE

TECHNICAL PRODUCTION

TECHNICAL PRODUCTION Fall Semester		Hours per Week Class	Lab	Credits per Semester
COM 200W	Image Theory	3	0	3
CST 105	Understanding Computers	3	0	3
COM 210	Advanced Video Production or Approved Elective	3	0	3
ART 212	Intermediate Photography or COM Elective	3	0	3
COM 205	Filmmaking	3	0	3
		15	0	15
Spring Semester				
COM 115	Writing for Media	3	0	3
ENG 220	Communicating About Values	3	0	3
— —	Social Science Elective	3	0	3
COM 135	Selecting, Evaluating and or Utilization of Media	3 (4)	0	3
	or			
COM 250	Communication Internship or Approved Elective	3	0	3
		15 (16)	0	15

Second Year A.A. Degree (See A.A. requirements on p. 57)

SECOND YEAR A.S. DEGREE

JOURNALISM

Fall Semester		Hours per Week Class	Lab	Credits per Semester
COM 200W	Image Theory	3	0	3
CST 105	Understanding Computers	3	0	3
ENG 163	Reporting	3	0	3
ENG 163L	Reporting Laboratory	2	0	1
ENG 170/ 175	Creative Writing (Publication)	3 (4)	0	3 (4)
COM 135	Selecting, Evaluating, and Utilization of Media	3	0	3
		16 (17)	0	16 (17)
Spring Semester				
COM 115	Writing for the Media	3	0	3
CST 119	Computer Concepts and Applications	2	2	3
ENG 220	Communicating About Values	3	0	3
— —	Social Science Elective	3	0	3
ENG 168	News Editing	3	0	3
ENG 163L	Reporting Laboratory	2	0	1
		16	2	16

†A minimum of 1 credit must be taken from PED 118, 119, 127, 135, 137, 143, 144, 146, 147, 148, 173.



CRIMINAL JUSTICE



DEPARTMENT CHAIRPERSON, Francis J. Short
Special Career Programs
Mechanical Building, Room 214
Telephone 778-5000 ext. 5087

COORDINATOR, Richard Fitzpatrick
Mechanical Building, Room 219
Telephone 778-5000 ext. 5029

This program is designed for full-time students desiring employment after two years of study. Careful planning and selection of courses is necessary to complete the program in two years. Consult the Criminal Justice Coordinator for specific details on selection of proper electives. Criminal Justice electives are described on page 100 and some Criminal Justice courses are given in the evening only. (Students entering in the spring semester may require more than four semesters to complete the degree.) Not for prospective law students.

CURRICULUM ADVISORY COUNCIL
CRIMINAL JUSTICE

GENO DeANGELO — Sheriff, Broome County
CARL FENESCY — Broome County Security Director
ROBERT KENT — NYS Office of Parole
ALEX MINOR — Binghamton Police Department
DAVID NEMEC — Broome County Probation
ROGER SHALLER — Binghamton Police Department
HON. MARTIN SMITH — Broome County Judge
KENNETH STICA — Vestal Police Chief
STEPHEN VIZVARY — Security Consultant
RICHARD WAFFLE — NYS Park Police
J. BRADLEY WAHL — Broome County Probation

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR			Hours per Week		Credits per
Fall Semester			Class	Lab	Semester
ENG	110/ 110S	Written Expression I	3	0	3
SOC	110	Introduction to Sociology	3	0	3
CRJ	101	Introduction to Criminal Justice	3	0	3
CRJ	115	Juvenile Justice	3	0	3
PHI		Elective in Philosophy	3	0	3
PED	118	Personal Fitness	0	2	1
			15	2	16
Spring Semester					
PSY	110	General Psychology	3	0	3
SPK	102	Effective Speaking	3	0	3
POS	204/ 201	State and Local Govt. or American Govt.	3	0	3
CRJ	105	Corrections	3	0	3
CRJ	215/ CRJ 230	Police Administration/ Criminal Investigation	3	0	3
PED		Physical Education Elective	0	2	1
			15	2	16
SECOND YEAR					
Fall Semester					
CRJ	212W	Criminal Procedure and Constitutional Law	3	0	3
CRJ		Elective	3	0	3
— —		Math or Science Elective	3-4	0-3	3-4
— —		Psychology or Sociology Elective	3	0	3
		SAC 101/295/PSY 100 (one of three)	3	0	3
			15-16	0-3	15-16
Spring Semester					
CRJ	125	Penal Law	3	0	3
CRJ		Elective	3	0	3
— —		Free Elective	3	0	3
— —		Math or Science Elective	3-4	0-3	3-4
ENG	220	Communicating About Values	3	0	3
			15-16	0-3	15-16

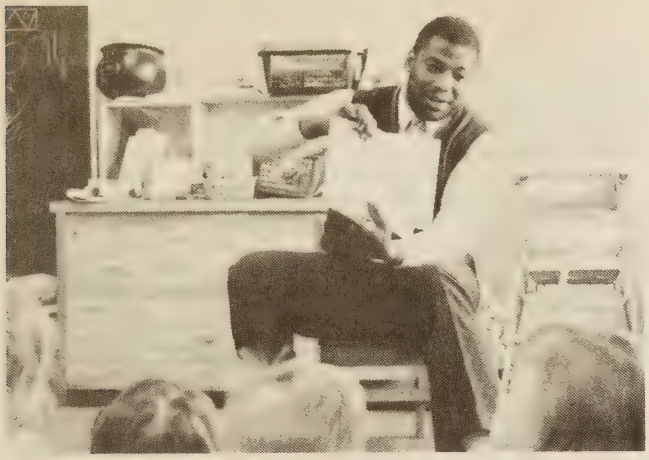
Recommendations for Electives
CRJ - 130, 225, 230, 255, 260
MATH-SCI - CHM 120, 121, PHS 111, BIO 111-112, MAT 113-114, 117
PSY - 214, 217, 227, 210
SOC - 210, 234, 111
PHI - 102, 206, 201, 111-112, 208

Two W emphasis courses are required after ENG 110 and before ENG 220.

W - Writing Emphasis Course

General Education Requirements: See page 25.

EARLY CHILDHOOD



DEPARTMENT CHAIRPERSON, Francis J. Short
Department of Special Career Programs
Mechanical Building, Room 214
Telephone 778-5000 ext. 5087

COORDINATOR, Barbara Nilsen
Mechanical Building, Room 219, Telephone 778-5000 ext. 5029

The Early Childhood program leads to an Associate in Applied Science and is designed to prepare graduates for immediate employment or, in the case of those students who are already working in the Early Childhood field when they enroll, to improve their capabilities and increase their opportunities for advancement.

This program is not for Elementary Education majors.

Students who know upon entrance to BCC that they want to transfer in Elementary Education should enroll in the Liberal Arts-AA Program.

The starting salary for graduates of the AAS degree program in Early Childhood who go to work immediately after graduation as aides or assistant teachers varies between $4 and $5 per hour. Director's positions usually require a baccalaureate degree with an average salary of $14,000 to $17,000 a year. Two year college graduates sometimes become directors with an additional salary which will vary with teachers' salaries.

A professional portfolio of materials pertaining to the education of young children is required of all students in the program. Assistance is provided in all classes for development of this material.

A Red Cross Safety and First Aid Certificate is recommended. Arrangements for this training are made each semester by the department. Added fee required.

PLEASE NOTE

The curriculum display shown here is for full-time students, and they should be aware that careful advisement is necessary to enable them to be properly scheduled in this program to complete the work in two years. Anyone interested in enrolling as a full-time student should therefore, consult with the coordinator or department chairman first.

CURRICULUM ADVISORY COUNCIL
EARLY CHILDHOOD

MARILYN SCHAFER — Former Coordinator, Early Childhood, Broome Community College
HELEN BUEMI — Education Coordinator Broome County Head Start
ANNE CAMPBELL — Handicapped Children's Assoc.
MARY FELICE — Family Day Care Giver
LUCILLE FRATTONE — Lourdes Daycare
PAT MACUMBER — Broome County Dept. of Social Services
PAT NASH — Endwell Nursery Care
KATHY SCHOFIELD — School Age Child Care
NANCY SELIGA — BCC Childcare Service
BRENDA TESTANI — Broome County Child Development Council

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR			Hours per Week		Credits per
Fall Semester			Class	Lab	Semester
ENG	110	Written Expression I	3	0	3
PSY	110	General Psychology	3	0	3
ECE	100	Introduction to Education of Young Children	2	2	3
SPK	102	Effective Speaking	3	0	3
ECE	175	Techniques of Observation and Evaluation	3	0	3
#PED		Physical Ed. Elective	0	2	1
			13-14	4-6	16
Spring Semester					
SOC	110	Introduction to Sociology	3	0	3
PSY	211	Child Development	3	0	3
ECE	120	Curriculum Development	2	2	3
*ECE		Elective	3	0	3
— —		Math/Science Elective	3-4	0-3	3-4
#PED		Physical Ed. Elective	0	2	1
			14	4	16
SECOND YEAR					
Fall Semester					
ECE	200W	Practicum I	2	4	4
ECE		Early Childhood Elective	2	2	3
— —		Math/Science Elective	3-4	0	3-4
*ECE		Early Childhood Elective	2	2	3
— —		Humanities Elective	3	0	3
			12-13	0-8	16-17
Spring Semester					
ENG	220	Communicating About Values	3	0	3
ECE	201	Practicum II	2	4	4
*ECE		Early Childhood Elective	2	2-0	3
†— —		Related Electives	3	0	6
			10	4-6	16

ECE COURSES ARE GIVEN MAINLY IN THE EVENING.

* ECE electives may be taken from among ECE 115 Music for Young Children, ECE 150 Motor Development, ECE 160 Nutrition for Young Children, ECE Child Health and Safety, ECE 210 Special Problems in Children, ECE 220 Issues and Innovations in Early Childhood, ECE 245 Social Development of Young Children, ECE 250 Language in Early Childhood, ECE 230 Working with Parents, ECE 260 Management and Administration.

† Related electives may be taken from among PSY 214 Abnormal Psychology, PSY 217 Counseling and Interviewing, PSY 227 Behavior Modification, SOC 210 Crime and Deviant Behavior, SOC 230 Marriage, Family and Divorce, SAC 101 The Individual in a Changing Environment, SAC 295 Seminar in Human Potential or from other disciplines with permission of the coordinator or department chairperson.

‡ Humanities electives might include LIT 263 Children's Literature, THR 117 Creative Dramatics, THR 201 Children's Theatre, PHI 203 Philosophical Issues in Education.

W - Students must take two Writing Emphasis ("W") Courses

#Two credits of Physical Education are required. One credit must be chosen from among: PED 118, 119, 127, 135, 143, 144, 146, 147, 148, 173.

* Recommended science courses are BIO 111, 112, 131, 132. Mathematics courses are by Placement Test; students usually take MAT 113, 114, 117, 124. (Developmental math may be necessary but is not creditable toward degree.)

General Education Requirements: See page 25.

FIRE PROTECTION TECHNOLOGY

FOR PART-TIME STUDENTS



DEPARTMENT CHAIRPERSON: Francis J. Short
Special Careers Programs
Mechanical Building, Room 214
Telephone: 778-5000 ext. 5087

COORDINATOR: Stephen Andrew
Mechanical Building, Room 214
Telephone: 778-5000 ext. 5087

The Fire Protection Technology Program is designed to provide fire fighters and related fire service personnel with specialized training. The curriculum has been developed by a local advisory committee to meet the needs of the area, and specialized courses as well as general education courses constitute the degree program. Specialized courses include Fire Fighter Tactics and Strategy, Arson Investigation, Hydraulics, Hazardous Materials, Fire Prevention, and Building Construction.

This program is open to both paid and volunteer fire fighters of the community, as well as those persons in related firematic areas.

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses	**Credits**
ENG 110 Written Expression I	3
Fire Protection Courses	9
Additional Courses for Certificate	
Mathematics or Science Elective (see list below)	3-4
Chemistry (see list below)	3
Social Sciences (see list below)	6
Fire Protection Courses	6
	30-31
Remaining Courses for Degree	
Fire Protection Courses	6
Health (see list below)	3
Management (see list below)	6
Electives (see list below)	12
ENG 220 Communicating About Values	3
AAS Fire Protection Technology Minimum Credits	60-61

NOTE: Students must fulfill General Education Requirements. See page 25. Courses taken at the New York State Fire Academy at Montour Falls will be reviewed for credit on an individual basis.

Recommended Electives

Chemistry: Suggest CHM 120 or CHM 121

Mathematics: Suggest MAT 139 (4 Credits) 124, 117

Social Sciences: Choose from History, Anthropology, Sociology, Psychology, Political Science, Economics. One course must be from the following: SOC 111, HIS 130/131, HIS 187, POS 201, 204, SOS 111/120, 130, ECO 110/111.

Health: Advanced First Aid, Emergency Medical Technician. Programs or equivalent may be submitted for approval. Students may elect BIO 131 Human Biology.

Fire Protection Courses: Select from FRS 101, FRS 103, FRS 105, FRS 107, FRS 108, FRS 110, FRS 200, FRS 201, FRS 204, FRS 205*, FRS 250, FRS 299.

W - Writing Emphasis Course

Management: Suggest BUS 245, 246, 110, 118, 141, 249, 150.

Electives: Courses with FRS, MAT designators, CHM 121, or other courses with permission.

General Education Requirements: See page 25.

CURRICULUM ADVISORY COUNCIL
FIRE PROTECTION TECHNOLOGY

STEPHEN ANDREW — BCC Coordinator
THOMAS GEISENHOF — Codes Officer - Owego/Student Representative
DAVID RICKARD — Chief - Five Mile Point Fire Company
MICHAEL HEIDE — Endicott Fire Department
MICHAEL ASWAD — County Fire Coordinator and Director of Emergency Services
GEORGE MANEY — Fire Chief - Johnson City
GEORGE SELTZER — President - Broome County Chiefs Assoc.
RICHARD WASHINGTON — Binghamton Fire Department
MICHAEL WASHINGTON — Binghamton Fire Department
THOMAS VROMAN — Broome County Arson Task Force and Endicott Fire Department
JAMES RYAN — NYS Fire Academy, Montour Falls
JOHN KRATCHOVIL — IBM Endicott Fire Officer
STEPHEN HRUSTICH — Endicott Fire Department
HARRY SMITH — Binghamton Fire Department
DONALD COLLINS — Endicott Fire Department

INDIVIDUAL STUDIES

DEPARTMENT CHAIR, Francis J. Short
Department of Special Career Programs
Mechanical Building, Room 214
Telephone 778-5000 ext. 5087

To provide opportunities for students with unusual needs or interests, Broome Community College allows selected students to structure individualized degree programs. The program requires the student to develop, with an advisor, an "area of concentration." **This area of concentration must be a cohesive program of study which the student can justify as having both educational and personal relevance.**

Completion of the Individual Studies Program can lead to an Associate in Science (AS) or Associate in Applied Science (AAS) degree, depending on the student's area of concentration. The AS degree program is designed for maximum transfer possibilities, and the AAS degree for immediate employment opportunities. **Admission into the program requires development of a Plan of Studies which is approved by the department chairman. This plan is developed by the student with a specific educational or career goal in mind.**

This is not a program for students unsure of their goals or exploring several areas of study.

Associate in Science Degree* (60 credits)

- 30 Credits in student's Area of Concentration.
- 30 Credits in English, Humanities, Natural Sciences, Mathematics and Social Sciences distributed as follows.
 6 Credits in Humanities (ENG 110 and 220 required)
 6 Credits in Social Science (3 must be designated General Education courses)*
 8 Credits in Laboratory Science or Mathematics
 10 Credits of Liberal Arts Electives
 2 Credits in Physical Education one Credit minimum from PED 118, 119, 127, 135, 137, 143, 144, 146, 147, 148, 173.

Associate in Applied Science Degree* (60 credits)

- Minimum of 20 semester credits in Liberal Arts and Sciences to include:
 6 Credits in Humanities (ENG 110 and ENG 220 required)
 6 Credits in Social Science (3 must be in designated General Education courses)
 8 Credits in Natural and Physical Science, including Mathematics
- 10 Credits of Technical Electives
- 30 Credits in student's Area of Concentration

For additional information contact the Department Chair.

*Students in both AS and AAS programs must also satisfy General Education requirements: (see page 25).

Music Performance and Education Concentration (An Individual Studies Concentration Program)

(Associate in Science Degree)

COORDINATOR, Michael Kinney
Alms House, Room A004
Telephone: 778-5000, ext. 5323

The individual studies program in music provides students the opportunity to pursue various musical interests by fully preparing them to develop basic skills. Many students transfer to four-year institutions and complete baccalaureate degrees in music in their areas of interest. The program is designed so that each student will develop a broad and comprehensive understanding of the theoretical and historical aspects of music through the performance and study of musical masterworks encompassing a wide variety of styles and idioms.

Students who are interested in enrolling in the A.S. Emphasis in Music program are encouraged to first consult the coordinator of the program in order to insure that the sequential requirements of the courses are properly scheduled.

Sequence of Courses: The model is a two-year course schedule for students meeting all program requirements and deciding to pursue full-time study. Schedules will be redesigned for those requiring prepatory courses or those deciding to pursue part-time study.

FIRST YEAR

Fall Semester		**Credits**
ENG 110	Written Expression	3
— —	Elective in Liberal Arts	3
MUS 101	Introduction to Music	3
MUS 105	Music Theory I	3
MUS 115	Ear Training I	1
MUS 120	Beginning Piano I	1
MUS 197*	Applied Music I	1
MUS	Ensemble	1
		16

Spring Semester		
— —	Social Science Elective	3
— —	Lab Science or Math	4
MUS 106	Music Theory II	3
MUS 112	Twentieth Century Music	3
MUS 116	Ear Training II	1
MUS 121	Beginning Piano II	1
MUS 198*	Applied Music II	1
MUS	Ensemble	1
		17

SECOND YEAR

Fall Semester		**Credits**
— —	Lab Science or Math	4
— —	Elective in Liberal Arts	3
PED	Elective in Physical Education	1
MUS 107	Music Theory III	3
MUS 117	Ear Training III	1
MUS	Music Elective	1
MUS 297*	Applied Music III	1
MUS	Ensemble	1
		15

Spring Semester		
ENG 220	Communicating About Values	3
— —	Liberal Arts Electives	4
— —	Social Science Elective	3
PED	Physical Education Elective	1
MUS	Music Elective	1
MUS 298*	Applied Music IV	1
MUS	Ensemble	1
		14

* These courses require an additional fee which should be discussed with the coordinator of the program.

PARALEGAL

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR			Hours per Week		Credits per
Fall Semester			Class	Lab	Semester
PSY/ SOC	110	General Psych or Intro to Sociology	3	0	3
ENG	110	Written Expression I	3	0	3
PLA	110	Survey of Paralegalism	3	0	3
BUS	100	Accounting I	4	0	4
BUS	118	Business Law I	3	0	3
‡PED		Physical Education	2	2	1
			18	2	17
Spring Semester					
— —		Arts and Sciences Elective	3	0	3
BUS	120W	Business Law II	3	0	3
PLA	120	Advanced Paralegalism	3	0	3
— —		Arts/Science Elective	3	0	3
PLA	200	Real Property Law	3	0	3
‡PED		Physical Education	2	2	1
			17	2	16
SECOND YEAR					
Fall Semester					
— —		Math/Science Elective	3-4	3	3-4
PLA	207W	Writing/Research	3	0	3
*— —		Social Science Elective	3	0	3
**PLA		Elective, 225 recommended	3	0	3
— —		Free Elective	3	0	3
			15-16	3	15-16
Spring Semester					
†— —		Math/Science Elective	3-4	3	3-4
PLA	215	Estates, Probates	3	0	3
— —		Free Elective	3	0	3
*PLA		Elective	3	0	3
ENG	220	Communicating About Values	3	0	3
			15-16	3	15-16

*Choose one from the following: SOC 110/111, HIS 130/131, POS 201, SOS 111/120/130, ECO 110/111.

†Recommended Math/Sciences: MAT 113/114/124, BIO 120, PHS 111.

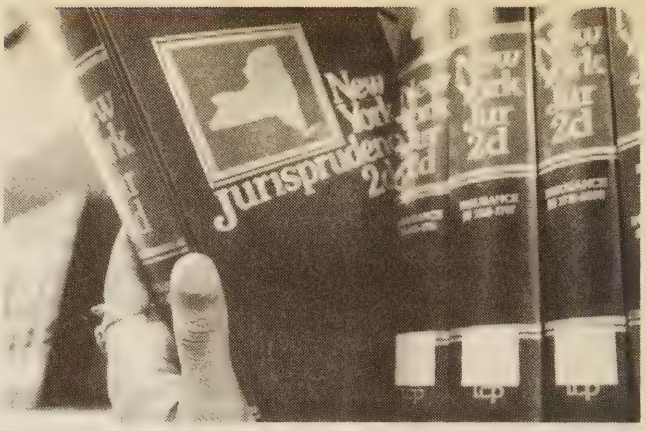
**Some Criminal Justice courses can be used as PLA electives. Consult with the coordinator or chairperson.

‡Choose at least one credit from PED 118, 119, 127, 135, 137, 143, 144, 146, 147, 148, 173

Two Writing Emphasis ("W") courses are required.
General Education Requirements: See page 25.

CURRICULUM ADVISORY COUNCIL
PARALEGAL

LYNN FORESMAN — Southern Tier Association of Paralegals
IDA GIALANELLA — Surrogate Court
HON. JOHN HILLIS — Binghamton City Court Judge
MARTIN J. KANE — Attorney - Chernin and Gold
BEVERLY LEGOS — Court of Claims
DEBORAH MCGUIRE — CLA - O'Connor, Gacioch & Pope
MADELINE NEMCEK — Falcon Abstract
EUGENE PECKHAM — Attorney - Hinman, Howard & Kattell
TANYA SCHMELLER — Columbian Mutual Life Insurance
PATRICIA SEXTON — Legal Assistant - Pearis, Ressequie, Kline & Barb



Suggested Sequence For Part-Time Students: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

DEPARTMENT CHAIRPERSON: Francis J. Short
Special Career Programs
Mechanical Bldg., Room 214
Phone (607) 778-5000 ext. 5087
Coordinator Mathew Vitanza
Phone (607) 778-5000 ext. 5087

Introductory Courses			**Credits**
ENG	110	Written Expression I	3
PLA	110	Survey of Paralegalism	3
PSY	110	General Psychology	3
SOC	110	Introduction to Sociology	3
Additional Courses for Certificate			
— —		Liberal Arts Elective	3
PLA	215	Estates, Probates & Trusts	3
PLA	120	Advanced Paralegalism	3
PLA	270W	Legal Writing and Research	3
PLA	200	Real Property Law	3
PLA		(Paralegal) Elective	3
			30
Remaining Courses for Degree			
BUS	100	Accounting I	4
PLA		Paralegal Electives	6
— —		Math/Science Electives	6
— —		Social Science Elective	3
ENG	220	Communicating About Values	3
BUS		**Business Elective	3
— —		Free Electives	6
PED		Physical Education	2
			33
AAS Paralegal Minimum Credits			63

**BUS 249, 245 recommended

Suggested Math/Science Courses:
MAT 113, MAT 114, MAT 124, MAT 145, BIO 131, CHM 120, PHS 111, , BIO 120.

This is not a pre-law program. Students wishing to transfer to four-year schools as pre-law majors should consult the department.
There are no bachelor's degree programs in Paralegal Studies locally, but programs in related areas may be of interest to Paralegal students.

W - Writing Emphasis Course

Most Paralegal courses are scheduled in the evening. Many courses are not offered every semester.

General Education Requirements: See page 25

ASSOCIATE IN SCIENCE DEGREE

Mental Health - Counseling Psychology and Social Work Emphasis

COORDINATOR, Margherita Rossi
Telephone 778-5000 ext. 5094

This course of study is mainly for students who wish to transer to upper division degree programs in mental health, such as social work and counseling psychology, and for those already in entry level positions in public and private agencies. Broad preparation during the first year is followed by greater concentration during the second year.

The number of students permitted to enter the second year of the program is limited by the availability of field placement openings in local agencies. Selection will take place during the spring semester of the Freshman year. Students who do not qualify can still complete A.A. degree requirements within the normal two-year period. For further details inquire at the Liberal and General Studies Divsion Office in Titchener Hall, (Room 121).

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR

Fall Semester		**Credits**
ENG 110	Written Expression	3
MAT	(MAT 124 Statistics I recommended)	3
HIS 115	Modern Global History	3
— —	Laboratory Science (BIO 131 Human Biology I recommended)	4
PSY 110	General Psychology	3
PED	Physical Education Elective	1
		17

Spring Semester		
MAT	Math as advised	3
SOC 110 or 111	Introduction to Sociology Social Problems	3
— —	Laboratory Science (BIO 132 (Human Biology II recommended)	4
HIS 186	Modern American Social History	3
PED	Physical Education Elective	1
LIT	Elective	3
		17

SECOND YEAR

Fall Semester		**Credits**
PSY 223	Intelligence and the Mentally Retarded	3
PSY 217	Counseling Theory and Practice	3
PHI	Philosophy Elective	3
SOC 250	Introduction to Social Work	3
— —	Liberal Arts Elective as advised	3
		15

Spring Semester		
PSY 227	Behavior Modification	3
PSY 214	Abnormal Psychology	3
SOS 290	Social Science Field Experience*	3
— —	Approved Elective	3
ENG 220	Communicating About Values	3
		15

* This internship experience generally involves 6 hours a week in such agencies as Binghamton Psychiatric Center, Broome Developmental Center, Broome County Social Services, Binghamton City Schools, New York State Division for Youth, Broome County Mental Health Association.

NOTE — Two of the above courses must be Writing Emphasis ("W") courses. See General Education Requirements on page 25.

Interior Design

Leads to Certificate

This is a credit program for individuals interested in a career in interior design or those currently employed in home furnishings or design related fields who would like to obtain greater knowledge and expertise. Those whose interests in design are not job-related are also encouraged to enroll.

Full-time Liberal Arts students are referred to the Design Arts Model for the A.A. degree on page 57.

			Credits
ART	102/ 103	History of Western Art	3+3
ART	105	Introduction to Design	3
ART	108/ 109	History of Architecture	3+3
*INT	110	Interior Design I	4
*INT	111	Interior Design II	4
INT	122	Professional Practice	3
ART	150	Graphic Rendering	3
INT	105	Basic Drawing	3
BUS	262	Small Business Management	3
INT	141	History of Fabric	2
INT	142	Fabric Analysis	2
		Total	33 (39)

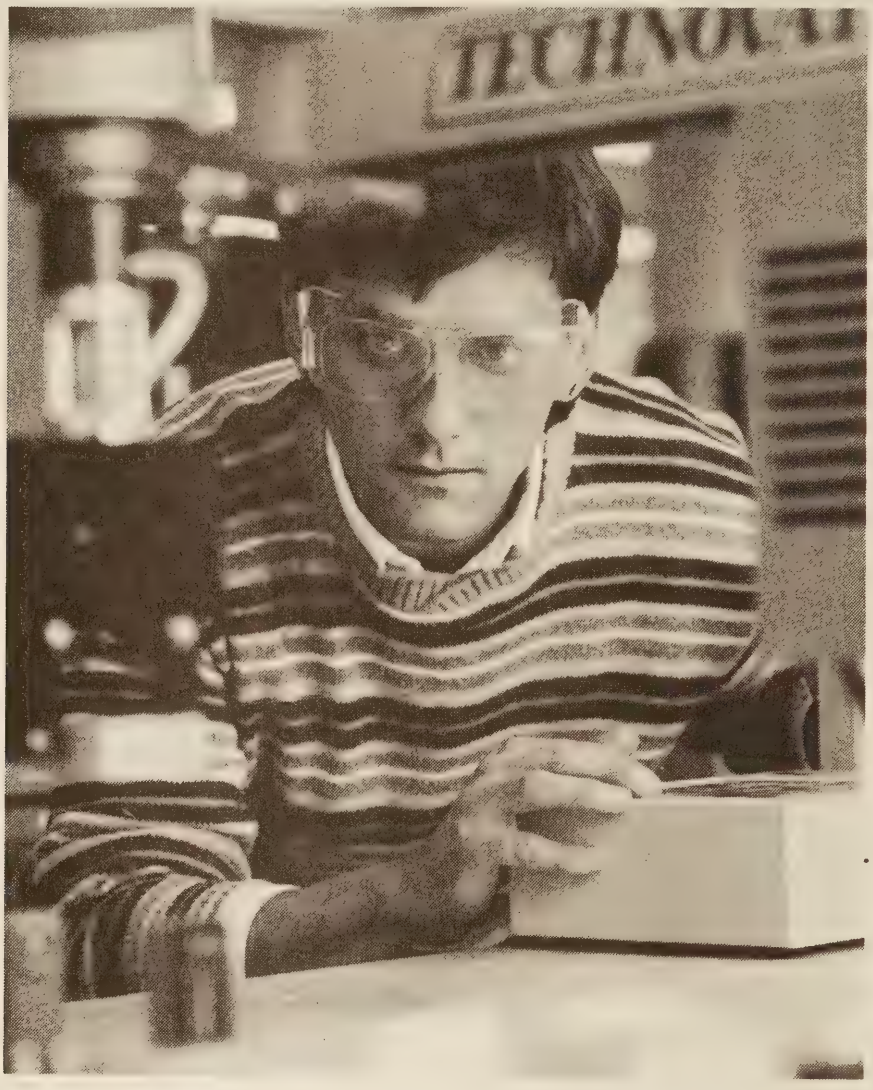
* These courses have prerequisites

More Information:
Coordinator, Anne B. Cotten
(Phone 778-5000 ext. 5315)

CURRICULUM ADVISORY COUNCIL
INTERIOR DESIGN

ROSEANNE GROFF, AIA; Partner, Bearsch, Compeau Associates
ROBERT KELLER, Assistant Professor, Art, Broome Community College
CORRINE MAXON, Professor, Home Economics, SUNY College at Oneonta
BEVERLY MCLEAN, Designer
LILLIAN NEZELEK, Guidance Coordinator, Binghamton High School

TECHNOLOGIES, ENGINEERING AND COMPUTING



In the area of technical education, the College offers 9 programs. One, Engineering Science, is in effect the first two years of an engineering curriculum. Students who do satisfactory work in it should experience little difficulty in transferring to engineering colleges at the third-year level.

Four others are designed to educate engineering technicians in the fields of Chemical Engineering Technology, Civil Engineering Technology, Electrical Engineering Technology and Mechanical Engineering Technology. Students in these programs are prepared for employment in various types of technical work immediately after graduation, although many students do transfer to four-year colleges.

The Computer Studies Department offers three programs — Computer Science, Computer Technology and Computer Information Systems. The Computer Science program is designed to prepare graduates for transfer to four-year colleges, while graduates of the other two are prepared for immediate employment or possible transfer.

Additionally, the College offers a program in Industrial Technology.

CHEMICAL ENGINEERING TECHNOLOGY

DEPARTMENT CHAIRPERSON, Brendan R. Flynn
Science Building, Room 108, Telephone 778-5000 ext. 5009

The Chemical Engineering Technology curriculum is designed to meet the increasing demand for chemical technicians. Graduates are qualified for immediate gainful employment. Many of them have also continued their studies toward advanced degrees in chemistry and chemical engineering at the junior level either as full-time students or on a part-time basis while employed. This background makes the Chemical Engineering Technology graduate highly sought after by employers and concurrently affords them the flexibility to advance academically and professionally.

Chemical technicians of both sexes have filled a vital manpower need in companies and organizations where background in various areas of chemistry is necessary or desirable. The Chemical Engineering Technician has opportunities to be employed in a wide variety of fields such as environmental analysis, petroleum and other forms of energy, pharmaceuticals, plastic rubber, pulp and paper, and biological and electronic materials. Non industrial job opportunities exist in medical laboratories, municipal health and sanitation agencies, and state and federal environmental agencies.

Employers of chemical technicians include IBM (Endicott, Vermont, Mass., and Austin), Anitec, NYSE&G, Corning Glass, GE, Norwich-Eaton Pharmaceuticals, Sandia, Hadco, Bendix, Chenango Industries, International Paper, Eastman Kodak, Union Carbide, Grumman Aerospace, Sandoz Pharmaceuticals and many others. Industrial Co-ops as well as scholarships are provided by many of these companies to show their support of the program.

Initial positions are usually in a research, development, process quality control or analytical laboratory or in a pilot plant. In these positions a chemical technician may work for a senior staff member or be a member of a group working in a particular area. Experienced chemical technicians have become supervisors, group leaders, technical salesmen, and research and development technicians.

The 1990 graduates of this program averaged $21,000 in starting salaries ranging from $20,000 to $23,000.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board of Engineering and Technology (TAC/ABET), and it leads to an Associate in Applied Science degree.

CURRICULUM ADVISORY COUNCIL

CHEMICAL ENGINEERING TECHNOLOGY

DONALD FUREY — Eastman Kodak Company
DR. BRUCE RESNIK — Anitec Image Corp.
BARBARA TRIMM — Supervisor, Laboratory Services - NYS Electric and Gas
DR. LOUIS LIETO — Director, Anti-Infective Product Development - Norwich-Eaton Pharmaceuticals
JAMES SHURTLEFF, P.E. — Development Engineer, Impregnation/Dim-Stab - IBM Corporation
BRIAN E. STUTTS Ph.D. — Manager, Process Engineering - Corning Glass Works
DR. WILLIAM WITTOSCH — Manager, Employee Training and Development - International Paper Company

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
ENG 110	Written Expression I	3	0	3
CHM 161	Chemistry	3	4	4
*MAT 161	Pre-Calculus	4	0	4
†PHY 141	Physics	3	2	4
		13	6	15
Spring Semester				
ENG 150	Technical Writing	3	0	3
CHM 162W	Chemistry	3	4	4
*MAT 162	Applied Calculus	4	0	4
†PHY 142	Physics	3	2	4
CST 140	Computer for Chemists	2	2	3
		15	8	18
SECOND YEAR				
Fall Semester				
CHM 251	Chemical Engineering Tech Seminar	1	0	½
CHM 261	Organic Chemistry	3	6	5
CHM 265	Analytical Chemistry	3	6	5
CHM 271	Chemical Processes	3	4	5
‡— —	Social Science Elective	3	0	3
		13	16	18½
Spring Semester				
CHM 262	Organic Chemistry	3	6	5
CHM 266	Instrumental Analysis	3	6	5
CHM 272	Chemical Processes	3	4	5
— —	Social Science Elective	3	0	3
		12	16	18

GRADUATION REQUIREMENT: 69½ CREDITS

*or MAT 181-182 Calculus with Analytic Geometry I and II
†or PHY 161-162 Physics

W - Writing Emphasis Course: Two Required

‡One must be chosen from ECO 110/111, HIS 130/131, POS 201/204, SOS 111/120/130

CIVIL ENGINEERING TECHNOLOGY



DEPARTMENT CHAIRPERSON, Edward F. Dougherty
Mechanical Building, Room 117
Telephone 778-5000 ext. 5010

The Civil Engineering Technology curriculum at Broome Community College is designed to educate engineering technicians for employment in the civil engineering, architectural and surveying professions, and the construction industry. Civil engineering technicians are trained to work in the planning, design and construction of facilities and systems that are basic to industry, commerce and community living and to the welfare of people. Thus the graduates are prepared to work in the following areas:

Architectural Drawing-Design and CAD
Construction (Inspection-Estimating-Project Management)
Plane and Route Surveying
Structural Design Concepts

Starting positions may be in computer aided design (CAD), drafting design, estimating, testing of materials, specification writing, construction inspection, surveying, field engineering, sales and insurance adjusting. Excellent opportunities exist for advancement and promotion.

The 1991 graduates of the program averaged $21,240 in starting salaries and over the last two years the average starting salary for graduates was $18,884.

The Civil Engineering Technology Department offers the Associate in Applied Science degree in Civil Engineering Technology. This degree is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

Graduates of the program are eligible to become certified as Associate Engineering Technicians by the Institute for the Certification of Engineering Technicians. (NICET.)

Job opportunities exist locally, statewide and nationally for technicians regardless of gender. Graduates are employed by both large and small companies, and public agencies.

About 30% of the graduates transfer into Bachelor level programs.

In order for students to complete the curriculum in two years, the proper preparation is necessary. The minimum prerequisites are high school intermediate algebra, trigonometry and regents physics or their equivalents.

The curriculum is a broad-based program of study with considerable computer utilization infused into the course work.

CURRICULUM ADVISORY COUNCIL
CIVIL ENGINEERING TECHNOLOGY

JAMES BRYDEN AIA — Bryden Architects
RICHARD P. CHURCH — District Engineer, Department of Transportation
THOMAS S. COUGHLIN — President, EMJ/McFarland-Johnson Engineers, Inc.
DANIEL M. HOGAN — Exec. Dir., Assoc. Bldg. Contractors
WILLIAM LANE — President, William Lane, General Contractors
DENNIS T. O'DEA — Project Engineer, NYSEG
GARY WOOD, P.E.

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
CIV 111	Surveying I	2	6	4
CIV 115	Engineering Drawing I	1	3	2
CIV 110	Introduction to Technologies	1	0	½
ENG 110	Written Expression I	3	0	3
†MAT 161	Pre-Calculus	4	0	4
*PHY 141	Physics I	3	2	4
		14	11	17½
Spring Semester				
CIV 112	Surveying II	1	3	2
CIV 119	Architectural Drafting	0	4	2
CIV 124	Mechanics	3	0	3
†MAT 162	Applied Calculus or MAT 181	4	0	4
PHY 142	Physics II	3	2	4
ENG 150	Technical Writing	3	0	3
		14	8	18

* Students entering the program without physics may elect to take PHY 100 Preparatory Physics I during the first semester in place of PHY 141 Physics. PHY 141 Physics may be taken during the spring semester and PHY 142 Physics and CIV 124 Mechanics during the summer. This will allow the student to graduate on schedule. Preparatory Physics is not applicable toward the degree.

Transfer students should consider the MAT 181-182 Calculus with Analytic Geometry I and II sequence.

SECOND YEAR				
Fall Semester				
CIV 219	Strength of Materials	4	0	4
CIV 217W	Materials Testing	2	3	3
CST 122	Scientific Computer Programming FORTRAN	2	2	3
‡	Social Science Elective	3	0	3
Technical Elective (Choose 1)				
CIV 238	Architectural Design and Building Materials	(2)	(3)	(3)
CIV 205	Intro. to Computer Graphics with Arch. Applications	(2)	(3)	(3)
**MAT	Mathematics Elective	(4)	(0)	(4)
		13-15	5-8	16-17
Spring Semester				
CIV 224	Reinforced Concrete Design			
	or	2	3	3
CIV 226	Structural Steel Design			
CIV 216	Route Surveying	2	3	3
CIV 231	Estimating and Construction Planning	2	3	3
CIV 240	Soil Mechanics	2	3	3
‡— —	Social Science Elective	3	0	3
	Approved Technical Elective	2-4	3	3-4
		13-15	12-15	18-19

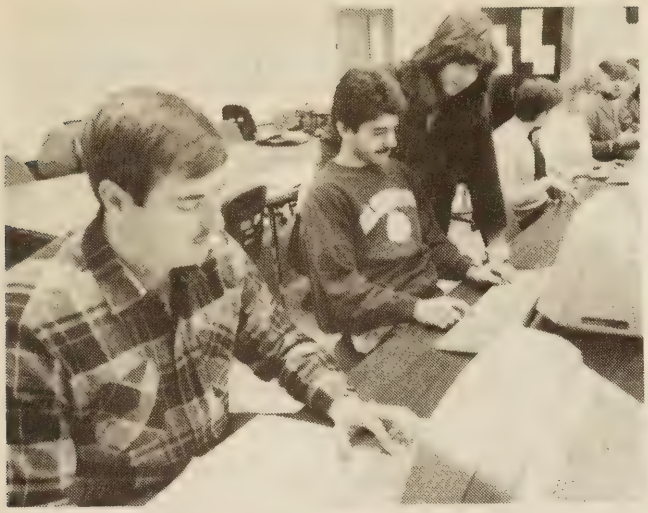
Technical Electives:

CIV 224	Reinforced Concrete Design
	or
CIV 226	Structural Steel Design
CIV 236	Construction Management
CIV 237	Hydraulics
CAD	CAD Elective
**MAT	Mathematics Elective

Waiver of this requirement by permission of department chairperson only.
**For students planning to transfer to a four (4) year college. Prior approval by department chair is required to take a more advanced Calculus course.
W - Writing Emphasis Course: Two Required
‡One must be chosen from: ECO 110/111, HIS 130/131, POS 201/204, SOS 111/120/130.

GRADUATION REQUIREMENTS: 69½ CREDITS

COMPUTER STUDIES



DEPARTMENT CHAIRPERSON, Beth Mollen
Applied Technology Building, Room 011
Telephone 778-5000 ext. 5022

The Computer Studies Department offers three different degree programs. Additionally, if a student is lacking required prerequisites for one of the three degree-granting programs, a student can be admitted as a Pre-Computer Studies student and take preparatory courses until the requirements are met. In each degree program, the student will learn to write modular structured programs which are well documented and easy to read and maintain. All courses will emphasize the importance of written and oral communication.

Students who choose a career in computing must, above all else, have the ability to think logically. They should be interested in organizing and analyzing information and should be able to pay close attention to detail and accuracy. Interesting and exciting careers are ahead for the student who has the personal drive to explore new fields of application and the ability to communicate with computer users.

The three degree programs are described below. The entrance requirements for each program are detailed on page 9 of this catalog. Typical four semester course sequences are shown on the pages following this one.

Part-time student programs are developed on an individual basis with the assistance of an academic advisor.

THE COMPUTER SCIENCE PROGRAM is designed to prepare graduates to transfer to four-year colleges and continue work toward a Bachelor of Science degree in Computer Science or Computer Information Systems. During the first semester the student selects an emphasis (mathematics, technical, or business) and is encouraged to investigate transfer colleges and select elective courses with a future career in mind. The emphasis on mathematics, structured programming, science, and data structures allows transfer with Junior standing. Graduates who wish to postpone transfer can find interesting employment opportunities.

THE COMPUTER TECHNOLOGY PROGRAM places less emphasis on mathematics and more on computer hardware, digital logic and microprocessors. Graduates are prepared to work in a technical environment where a knowledge of the interface between hardware and software is necessary. Starting positions include computer operator, technician, engineering aide, associate field engineer. Average starting salary is about $17,000. Graduates often find that more education is desirable. Transfer to four-year schools is possible and elective courses can be selected to allow transfer with Junior standing.

THE COMPUTER INFORMATION SYSTEMS PROGRAM places emphasis on the partnership between information systems and solving business problems. Graduates are prepared to work in a business environment where a knowledge of computer programming and application software is necessary. Starting positions include computer operator, junior programmer, data entry technician, information processing equipment operator. Average starting salary is about $15,000. This program meets the requirements of the DPMA (Data Processing Management Association) Model Curriculum for Computer Information Systems. With proper choice of electives, graduates who find that more education is desirable will be able to transfer credits to institutions offering this four-year degree.

COMPUTER STUDIES preparatory courses are for students not prepared for entry into the regular Computer Science, Computer Technology or Computer Information Systems program. Students who have not completed required high school subjects, such as Course I, II, and III Math, may be admitted to the department as Preparatory Computer Science students. Students in this category will take additional semesters of course work to prepare them for the standard Computer Studies curricula. Each student will be tested in the College Learning Center prior to scheduling to determine which level of Math and English courses is needed. Students who have not completed a high school computer course will be required to take one or more introductory computer courses. Students planning on enrolling in the Computer Technology or Computer Science Programs who have not completed high school Physics will be required to take preparatory physics. The actual student schedule will be personalized by the department for each entering student depending on his/her Math, English and/or Science abilities. All courses taken to meet prerequisite requirements will not count as credit towards the three different degree programs.

STUDENTS CAN ATTEND FULL-TIME OR PART-TIME BOTH DAY AND EVENING

PREPARATORY COURSES FOR COMPUTER STUDIES

The listing below shows some typical courses taken by students not prepared for immediate entry into the Computer Studies Program:

			Class	Lab	Credits
CST	105	Understanding Computers	2	2	3
CST	115	Introduction to Pascal	2	2	3
CST	118	Introduction to Cobol	2	2	3
ENG	090	Basic Language Skills	4	0	0
MAT	090	Arithmetic/Lang. of Alg.	4	0	0
MAT	092	Intro. to Concepts of Algebra	4	0	0
MAT	099	Elementary Algebra	5	0	0
MAT	139	Algebra	4	0	4
MAT	140	Trigonometry	4	0	4
MAT	161	Pre-Calculus	4	0	4
PHY	100	Prep. Physics	4	0	0

COMPUTER SCIENCE
(Associate in Science Degree)



The listing below shows the degree requirements. Electives are determined by the emphasis chosen. Students may select from Business, Technical, and Mathematics emphasis shown on the following pages.

		Credits
CST 117	Language Independent Design Tools	2
CST 119	Computer Concepts and Applications	3
CST 132	Structured Programming in Pascal	4
MAT or CST	Electives Electives must include either CST 202W Data Structures with Advanced Pascal or CST 218W Advanced Cobol	9-10
MAT 181	Calculus I with Analytic Geometry	4
MAT 182	Calculus II with Analytic Geometry	4
MAT 250	Discrete Mathematics	4
MAT 264	Linear Algebra	4
Laboratory Science Sequence	A full year sequence of physics, chemistry or physical science. Acceptable sequences: PHY 161-162, PHY 181-182 Physics CHM 145-146 Chemistry PHS 113-114-115-116-215 Physical Science (any 2)	8
ENG 110	Written Expression	3
ENG 220	Communicating About Values	3
Social Science (one must be a "W" emphasis)	Choose from ANT, ECO, GEO, POS, PSY, SOC, SOS. One Course must be from the following: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.	6
History		3
PHI 202	Logic	3
Physical Education		2
Approved Electives	See emphasis for recommended electives. All others must be approved by the Department Chairperson.	6-10

GRADUATION REQUIREMENTS: 69-72 CREDITS

W - Writing Emphasis Course

COMPUTER SCIENCE
Business Emphasis
(Associate in Science Degree)

FIRST YEAR		Hours per Week Class	Lab	Credits per Semester
Fall Semester				
CST 101	Orientation	1	0	0
CST 117	Language Independent Design Tools	2	0	2
CST 119	Computer Concepts and Applications	2	2	3
CST 132	Structured Prog. in Pascal	3	2	4
ENG 110	Written Expression	3	0	3
MAT 181	Calc I w/Analyt Geometry	4	0	4
*— —	Social Science Elective	3	0	3
		18	4	19
Spring Semester				
CST 128	Structured Prog with COBOL	3	2	4
HIS	History Elective	3	0	3
MAT 182	Calc II w/Analyt Geometry	4	0	4
PHI 202	Logic	3	0	3
*— —	Social Science W Elective	3	0	3
†PED	Physical Education Electives	0	2	1
		16	4	18
SECOND YEAR				
Fall Semester				
CST 218W	Advanced COBOL	2	2	3
MAT 250	Discrete Mathematics	4	0	4
BUS 100	Accounting I	4	0	4
— —	Lab Science (begin sequence)	3	3	4
ENG 220	Communicating About Values	3	0	3
		16	5	18
Spring Semester				
MAT 264	Linear Algebra	4	0	4
BUS 101	Accounting II	4	0	4
— —	Lab Science (complete sequence)	3	3	4
MAT/or CST	Elective	2-4	0-4	3-4
PED	Physical Education Electives	0	2	1
		13-15	5-9	16-17

GRADUATION REQUIREMENTS: 71-72 CREDITS

* One Course must be from the following: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.

W - Writing Emphasis Course: Two Required

†One credit must be chosen from: PED 118, 119, 127, 135, 137, 143, 144, 146, 147, 173.

See General Education Requirements on page 25.

COMPUTER SCIENCE
Mathematics Emphasis
(Associate in Science Degree)

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
CST 101	Orientation	1	0	0
CST 117	Language Independent Design Tools	2	0	2
CST 119	Computer Concepts and Applications	2	2	3
CST 132	Structured Prog. in Pascal	3	2	4
ENG 110	Written Expression	3	0	3
MAT 181	Calc I w/Analyt Geometry	4	0	4
*— —	Social Science Elective	3	0	3
		18	4	19
Spring Semester				
CST 202W	Data Structures w/ Adv Pascal	2	2	3
HIS	History Elective	3	0	3
MAT 182	Calc II w/Analyt Geometry	4	0	4
PHI 202	Logic	3	0	3
*— —	Social Science W Elective	3	0	3
‡PED	Physical Education Electives	0	2	1
		15	14	17
SECOND YEAR				
Fall Semester				
CST 170	Digital Logic	2	2	3
MAT 250	Discrete Mathematics	4	0	4
MAT 281	Calc III w/Analyt Geometry	4	0	4
PHY 161	Physics I	3	3	4
ENG 220	Communicating About Values	3	0	3
		16	5	18
Spring Semester				
MAT 264	Linear Algebra	4	0	4
MAT 266	Intro to Higher Math	3	0	3
PHY 162	Physics 2	3	3	4
CST	Approved Elective	(2)	(2)	(3)
	or			
MAT 282	Differential Equations	(4)	(0)	(4)
‡PED	Physical Education Electives	0	2	1
		12-14	5-7	15-16

GRADUATION REQUIREMENTS: 69-70 CREDITS

* One Course must be from the following: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.

‡Choose one credit from: PED 118, 119, 127, 135, 137, 143, 144, 146, 147, 148, 173

W - Writing Emphasis Course: Two Required

See General Education Requirements on page 25.

COMPUTER SCIENCE
Technical Emphasis
(Associate in Science Degree)

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
CST 101	Orientation	1	0	0
CST 117	Language Independent Design Tools	2	0	2
CST 119	Computer Concepts and Applications	2	2	3
CST 132	Structured Prog. in Pascal	3	2	4
CST 170	Digital Logic	2	2	3
ENG 110	Written Expression	3	0	3
MAT 181	Calc I w/Analyt Geometry	4	0	4
		17	6	19
Spring Semester				
CST 202W	Data Structures w/ Adv Pascal	2	2	3
CST 220	Microproc & Assembly Language	2	2	3
*— —	Social Science Elective	3	0	3
MAT 182	Calc II w/Analyt Geometry	4	0	4
PHI 202	Logic	3	0	3
‡PED	Physical Education Electives	0	2	1
		14	6	17
SECOND YEAR				
Fall Semester				
CST 225W	Introduction to Small Systems	2	2	3
MAT 250	Discrete Mathematics	4	0	4
PHY 161	Physics I	3	3	4
†— —	Approved Elective	2-4	0-4	3-4
*— —	Social Science Elective	3	0	3
		14-16	5-9	17-18
Spring Semester				
MAT 264	Linear Algebra	4	0	4
CST	Approved Elective	2	2	3
PHY 162	Physics 2	3	3	4
ENG 220	Communicating About Values	3	0	3
PED	Physical Education Elective	0	2	1
HIS	History Elective	3	0	3
		15	7	18

GRADUATION REQUIREMENTS: 71-72 CREDITS

* One Course must be from the following: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.

W - Writing Emphasis Course: Two Required

†Approved Electives:
CST 155, CST 158, CST 160, CST 180, CST 181, CST 200, CST 201W, CST 213, CST 214, CST 228, CST 297, CAD 150, CAD 205, CAD 211, CAD 252, MAT 125. Others require permission of Department Chairperson.

‡Choose one credit from: PED 118, 119, 127, 135, 137, 144, 146, 147, 148, 173.

See General Education Requirements on page 25.

COMPUTER TECHNOLOGY
(Associate in Applied Science Degree)

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
CST 101	Orientation	1	0	0
CST 117	Language Independent Design Tools	2	0	2
CST 119	Computer Concepts and Applications	2	2	3
CST 132	Structured Prog. in Pascal	3	2	4
CST 170	Digital Logic	2	2	3
ENG 110	Written Expression	3	0	3
PHY 161	Physics I	3	3	4
		16	9	19
Spring Semester				
MAT 125	Statistics I Using Computers	3	1	3
CST 202W	Data Structures w/ Adv Pascal	2	2	3
*— —	Social Science Elective	3	0	3
CST 220	Microproc & Assembly Language	2	2	3
PHY 162	Physics II	3	3	4
		13	8	16
SECOND YEAR				
Fall Semester				
CST 225	Introduction to Small Systems	2	2	3
MAT 145	Finite Mathematics	3	0	3
CST 155	C. Programming	2	2	3
CST 200	Systems Analysis I	2	2	3
*— —	Social Science Elective	3	0	3
		12	6	15
Spring Semester				
ENG 220	Communicating About Values	3	0	3
†— —	Approved Elective	2-4	0-4	3-4
CST 160	ADA Programming	2	2	3
CST	Approved Elective	2-4	0-2	3-4
SPK 102	Effective Speaking	3	0	3
		12-16	2-8	15-17

GRADUATION REQUIREMENT: 65-67 CREDITS

†Approved Electives:
CST 158, CST 180, CST 181, CST 201W, CST 213, CST 214, CST 228, CST 297, MAT 161, MAT 181, MAT 182, CAD 150, CAD 205, CAD 211, CAD 252, MAT 125. Others require permission of Department Chairperson.

* One Course must be from the following: ECO 110/111, HIS 130/131, POS 201/204, SOC 110/111, SOS 111/120/130.

W - Writing Emphasis Course: Two Required

See General Education Requirements on page 25.

COMPUTER INFORMATION SYSTEMS
(Associate in Applied Science Degree)

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
CST 101	Orientation	1	0	0
CST 117	Language Independent Design Tools	2	0	2
CST 119	Computer Concepts and Applications	2	2	3
CST 115	Intro. to Pascal	2	2	3
ENG 110	Written Expression	3	0	3
BUS 100	Accounting I	4	0	4
ECO 110	Microeconomics	3	0	3
		17	4	18
Spring Semester				
CST 128	Structured Programming in COBOL	3	2	4
CST 158	Spreadsheets - Financial Applications	2	2	3
ECO 111	Macroeconomics	3	0	3
MAT 125	Statistics I Using Computers	3	1	3
BUS 101	Accounting II	4	0	4
		15	5	17
SECOND YEAR				
Fall Semester				
CST 200	Systems Analysis I	2	2	3
CST 213	Database Systems	2	2	3
BUS	Elective	3	0	3
**PHS	Physical Science Elective	3	3	4
CST 218W	Advanced COBOL	2	2	3
		12	9	16
Spring Semester				
SPK 102	Effective Speaking	3	0	3
CST 201W	Systems Analysis II	2	2	3
CST 214	Computer Operations: Procedures and Management	2	2	3
CST/MAT/BUS Elective		2-4	0-2	3-4
ENG 220	Communicating About Values	3	0	3
		12-14	4-6	15-16

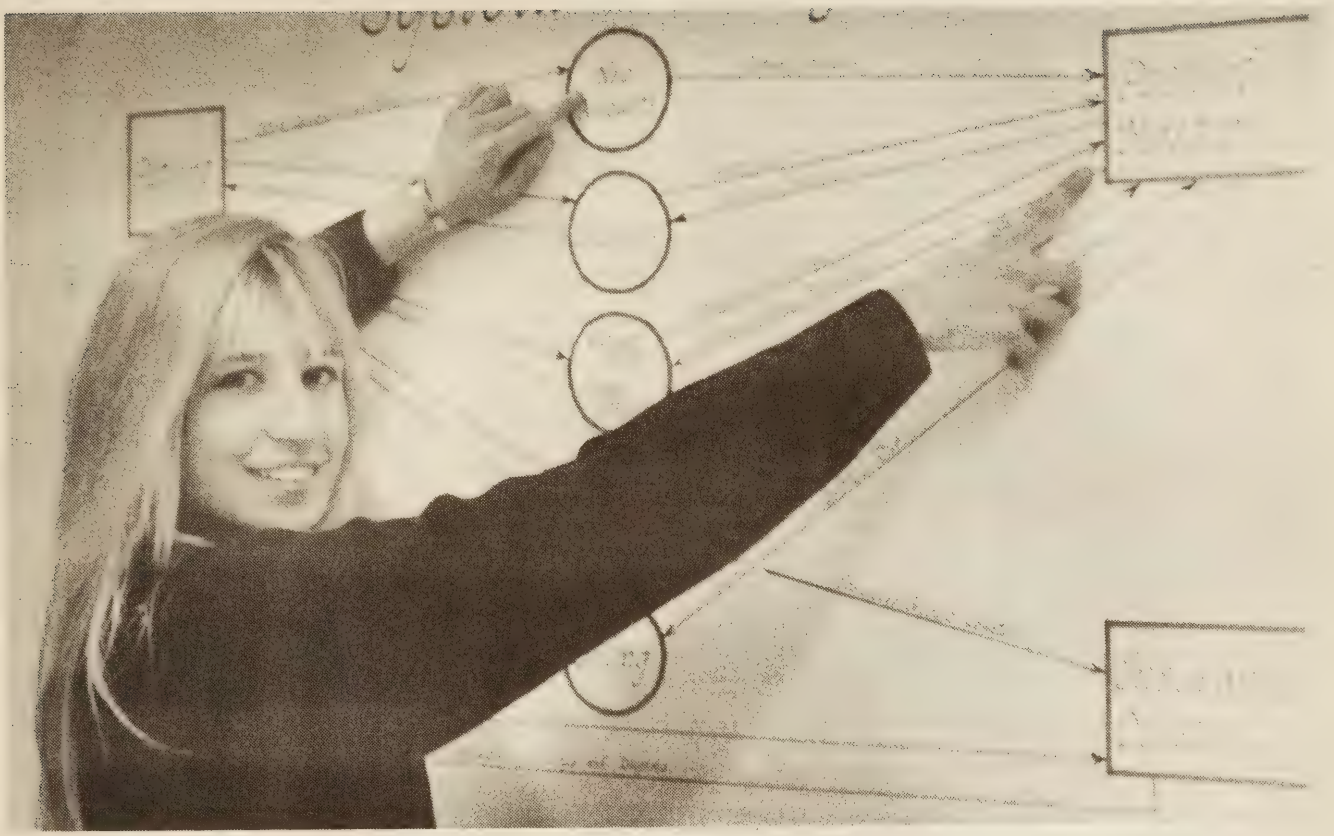
GRADUATION REQUIREMENT: 66-67 CREDITS

**ANY ONE of the following physical science courses: PHS 113, 114, 115, 116, 215

MAT Electives: MAT 145 or higher
CST Electives: CST 116, CST 155, CST 160, CST 170, CST 181, CST 202.

W - Writing Emphasis Course: Two Required.

See General Education Requirements on page 25.



ELECTRICAL ENGINEERING TECHNOLOGY

DEPARTMENT CHAIRPERSON, Alan C. Dixon
Applied Technology Building, Room 201
Telephone 778-5000 ext. 5017

The Electrical Engineering Technology program at Broome Community College is made up of a planned sequence of college level courses leading to the Associate in Applied Science Degree. Engineering Technology emphasizes both the theory and application of established scientific and engineering methods and prepares the student for immediate employment or for transfer to an upper division school upon graduation. Students are prepared for general work in Electrical Engineering Technology and are able to select one of three emphasis areas: Robotics, Electronic Communications, or Microcomputers.

The graduate is prepared to be the intermediary between the design engineer and skilled craftsman. EETs translate problems into solutions by building equipment using their knowledge of mathematics, physics, linear and digital electronics, microprocessor hardware and software, machines, robotics, process control, circuit analysis, and computer programming languages. This occurs whether working in a small company as the only technician or in a large company as part of a team. Both men and women find rewarding careers through this program.

This program may require longer than two years to complete if an entering student has not completed Math I, II, III and physics in high school. Students lacking any of these courses enter our pre-electrical technology program and may be required to take MAT 099 Elementary Algebra to prepare them for MAT 139 College Algebra and MAT 140 Trigonometry or PHY 100 Preparatory Physics and EET 110 Introduction to Electricity to prepare for Electrical Circuits and College Physics.

Graduates work for companies like New York State Electric and Gas, International Business Machines, Xerox, Eastman Kodak, General Electric, Universal Instruments, Link/Miles Flight Simulation, Bell Laboratories, Raymond Corporation, Sandia National Laboratory, Digital Equipment Corporation, and Corning Glass.

Starting positions include engineering assistant, technical specialist for electronics, computers, field service, or sales. Starting salaries for graduates averaged $18,340 in 1991, covering a range from $12,480 to $25,000.

Many graduates find that more education is desirable and have successfully completed advanced study at State University of New York Colleges at Utica-Rome and Buffalo, as well as at Rochester Institute of Technology, Clarkson University, and others.

Graduates with a minimum of 2.5 can transfer with full junior status into a Bachelor of Technology program at a number of institutions. Some graduates prefer a pure engineering degree and transfer to accredited Bachelor of Science programs. Usual requirements are a minimum GPA of 3.2 and appropriate additional courses in math (MAT 181, MAT 182, MAT 281), physics (PHY 181, PHY 182, PHY 281), chemistry, and statics and dynamics.

Students use excellent state-of-the-art computer facilities which include personal computers and three VAX computers interconnected by a local area network, Ethernet. The faculty, along with large, well equipped labs and a building highlighted by a 30 foot high open atrium create a learning atmosphere that is first class.

The program has grown in its 44 years to embrace the areas of microprocessors, robotics, and fiber optics. In its new facilities are housed specialized equipment including logic analyzers, development systems, robots, spectrum analyzers, digital signal processors, programmable component analyzers, power system simulators, and numerous CAD (computer aided design) workstations. The program and equipment remain current through the efforts of an experienced and dedicated faculty.

The program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

PREPARATORY COURSES FOR ELECTRICAL ENGINEERING TECHNOLOGY

The following are suggested sequences of courses for students not prepared for entry into the regular Electrical Engineering Technology program. This sequence is for students who have not had the necessary high school math and physics. Each entering student is tested in the College Learning Center prior to scheduling. The actual student schedule is personalized by the department for each entering student.

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

Fall semester		Hours per Week		Credits per
		Class	Lab	Semester
EET 100	Introduction to Electrical Engineering Technology	1	0	½
EET 110	Introduction to Electricity	3	0	3
EET 111	Electrical Construction Lab I	1	3	2
MAT 139	Algebra	4	0	4
PHY 100	Preparatory Physics	4	0	4
		13	3	13½
Second Semester				
EET 112	Electrical Construction Lab II	0	3	1
EET 130	Engineering Drawing	0	3	1
ENG 110	Written Expression	3	0	3
MAT 140	Trigonometry	4	0	4
PHY 141	Physics	3	2	4
		10	8	13

OR

First Semester				
EET 100	Introduction to Electrical Engineering Technology	1	0	½
EET 110	Introduction to Electricity	3	0	3
EET 111	Electrical Construction Lab I	1	3	2
ENG 110	Written Expression I	3	0	3
MAT 099	Elementary Algebra	5	0	5
		13	3	13½
Second Semester				
EET 112	Electrical Construction Lab II	0	3	1
EET 130	Engineering Drawing	0	3	1
ENG 150	Technical Writing	3	0	3
MAT 139	Algebra	4	0	4
PHY 100	Preparatory Physics	4	0	4
		11	6	13

CURRICULUM ADVISORY COUNCIL
ELECTRICAL ENGINEERING TECHNOLOGY

JOHN CZEBINIAK, Universal Instruments
JOHN EKSTROM, NYSEG
ELDRED PAUFVE, Universal Instruments
ROBERT ROSE, IBM Corp.
JOSEPH SVOBODA, BOCES
CHARLES TAYLOR, SUNY at Binghamton

ELECTRICAL ENGINEERING TECHNOLOGY

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

COMMON FIRST YEAR

Fall Semester		Hours per Week Class	Lab	Credits per Semester
CST 141	Fortran Programming with Graphic Applications	2	2	3
EET 111	Electrical Construction Laboratory I	1	3	2
EET 121	Electrical Circuits	4	3	5
EET 100	Introduction to Electrical Engineering Technology	1	0	½
ENG 110	Written Expression I	3	0	3
*MAT 161	Pre-Calculus	4	0	4
		15	8	17½
Spring Semester				
EET 112	Electrical Construction Laboratory II	0	3	1
EET 130	Engineering Drawing	0	3	1
EET 150W	Electronic Devices	4	3	5
EET 162	Computer Aided Network Analysis	3	0	3
ENG 150	Technical Writing	3	0	3
*MAT 162	Applied Calculus or	4	0	4
*MAT 181	Calculus I with Analytic Geometry			
		14	9	17

SECOND YEAR EMPHASIS

ELECTRONIC COMMUNICATIONS

Fall Semester		Hours per Week Class	Lab	Credits per Semester
EET 201	Senior Seminar	1	0	0
EET 247W	Energy Conversions	3	0	3
EET 247L	Energy Lab Elective	0	3	1
EET 251	Electronic Circuitry	3	3	4
EET 267	Digital Electronics and Microprocessors I	3	2	4
PHY 141	Physics I	3	2	4
SOS xxx	Social Science Elective	3	0	3
		16	10	19
Spring Semester				
EET 202	Senior Seminar	1	0	0
EET 230	Electronic Design and Fabrication	0	3	1
EET 252	Electronic Systems	3	3	4
EET 270	Control Systems	3	3	4
EET 271	Communication Techniques	0	3	1
PHY 142	Physics II	3	2	4
— —	Social Science Elective	3	0	3
		13	14	17

SECOND YEAR EMPHASIS

ROBOTICS

Fall Semester		Hours per Week Class	Lab	Credits per Semester
EET 201	Senior Seminar	1	0	0
EET 247W	Energy Conversions	3	0	3
EET 247L	Energy Lab Elective	0	3	1
EET 251	Electronic Circuitry	3	3	4
EET 267	Digital Electronics and Microprocessors I	3	2	4
PHY 141	Physics I	3	2	4
SOS xxx	Social Science Elective	3	0	3
		16	10	19
Spring Semester				
EET 202	Senior Seminar	1	0	0
EET 230	Electronic Design and Fabrication	0	3	1
EET 252	Electronic Systems	3	3	4
EET 274	Robotic Applications	3	3	4
EET 275	Machine Vision Lab	0	3	1
PHY 142	Physics II	3	2	4
— —	Social Science Elective	3	0	3
		13	14	17

SECOND YEAR EMPHASIS

MICROCOMPUTERS

Fall Semester		Hours per Week Class	Lab	Credits per Semester
EET 201	Senior Seminar	1	0	0
EET 247W	Energy Conversions	3	0	3
EET 247L	Energy Lab Elective	0	3	1
EET 251	Electronic Circuitry	3	3	4
EET 267	Digital Electronics and Microprocessors I	3	2	4
PHY 141	Physics I	3	2	4
SOS xxx	Social Science Elective	3	0	3
		16	10	19
Spring Semester				
EET 202	Senior Seminar	1	0	0
EET 230	Electronic Design and Fabrication	0	3	1
EET 252	Electronic Systems	3	3	4
EET 272	Microcontroller Fundamentals	3	3	4
EET 273	Computer Design Lab	0	3	1
PHY 142	Physics II	3	2	4
— —	Social Science Elective	3	0	3
		13	14	17
Fall Semester Energy Lab Electives:				
EET 247-L01	Power Systems Lab	0	3	1
EET 247-L02	Programmable Controllers Lab	0	3	1
EET 247-L03	Energy Conversions Lab	0	3	1

GRADUATION REQUIREMENTS: 70½ CREDITS

*Students should consult with the department chairman or his designee to determine the appropriate mathematics courses.

W - Writing Emphasis Course: Two Required.

ENGINEERING SCIENCE

DEPARTMENT CHAIRPERSON, Jack D. Foster
ACADEMIC ADVISOR, Peter Ruggieri
Applied Technology Building, Room 101
Telephone 778-5000 ext. 5114

The Engineering Science curriculum is designed primarily to prepare graduates to continue their studies in the various engineering disciplines at four-year colleges and universities. The strong emphasis on mathematics and physics also allows graduates to transfer to these majors at four-year institutions, with junior-year standing. In addition, there are immediate employment possibilities for qualified graduates who wish to terminate or postpone further educational goals until a more opportune time.

Broome Community College is a member of the New York State Two-Year Engineering Science Association. The purpose of this organization is to facilitate the transfer to four-year colleges, with junior-year standing, of two-year college graduates from engineering science programs. State University of New York at Binghamton, SUNY at Buffalo and SUNY at Stony Brook, Rensselaer Polytechnic Institute (RPI), Clarkson, Rochester Institute of Technology (RIT), Cornell, Syracuse and Union are among the Engineering Schools who have agreed to give top priority to applicants with an A.S. degree in Engineering Science and who have been recommended by their department. Some students find it desirable to transfer out of state upon graduation. They, too, in most cases will transfer as full juniors and graduate with a Bachelor of Science in two more years. Broome Community College has an articulation agreement with Wilkes College in Pennsylvania and students have successfully transferred to places like Virginia Polytechnic Institute, Northwestern, Penn State, and the University of New Mexico. Feedback from these and other institutions to which Broome Community College students transfer indicates a high regard for the graduates and the quality of the Engineering Science program at BCC.

For students who wish to complete their education locally, Broome Community College and SUNY Binghamton have a cooperative admissions plan for entering freshmen. Students accepted in this program are guaranteed transfer to SUNY Binghamton as long as they maintain a grade point average of 3.00 at Broome.

Those graduates who prefer to seek immediate employment will find job opportunities as engineering technicians or as assistants to engineers involved in research and development. In addition, employment opportunities also exist which involve the application of mathematics and computer programming.

Students entering Broome Community College who wish to continue studying for their Bachelor's degrees in engineering, applied mathematics, or physics will find the Engineering Science program the most appropriate course of study. As a reasonable guideline for successful achievement in those rigorous programs, a student's course work in high school should be above the 80% level in all areas. (See page 9 for specific requirements.)

COMPUTER RECOMMENDATION

Students in the A.S. degree Engineering Science Program will need to use the computer to solve technical assignments and prepare reports for submission. BCC faculty give assignments which can only be done on the computer. Engineering science students are strongly urged to purchase their own personal computer upon entering the program. This will ensure that students will have home computer access as well as College lab access when needed so that assignments can be completed in a timely fashion. A PC or PS/2* or compatible computer with graphics capability, a 3.5" disk drive and a 20 megabyte hard drive is recommended. IBM computers can be ordered through BCC's Computer Center where special student rates are available.

*Registered trademark of the International Business Machines Corporation.

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
PED	Physical Education Elective	0	2	1
CHM 145	Chemistry	3	3	4
MAT 181	Calculus I with Analytic Geometry	4	0	4
EGR 150	Engineering Graphics	1	3	2
PHY 181	Engineering Physics I	3	2	4
ENG	Written Expression	3	0	3
EGR 100	Orientation	3	0	0
		17	10	18
Spring Semester				
CHM 146	Chemistry	3	3	4
EGR 151	Applications in Engineering	2	2	3
MAT 182	Calculus II with Analytic Geometry	4	0	4
PHY 182	Engineering Physics II	3	2	4
†— —	Social Science Elective	3	0	3
EGR 100	Orientation	3	0	0
		18	7	18
SECOND YEAR				
Fall Semester				
*EGR 281	Mechanics: Statics 3	0	3	
EGR 285	Electrical and Electronic Circuits	3	0	3
EGR 287	Engineering Science Laboratory I	0	3	1
MAT 281	Calculus III with Analytic Geometry	4	0	4
PHY 281W	Engineering Physics III	4	0	4
†— —	Social Science Elective	3	0	3
EGR 200	Orientation	2	0	0
		19	3	18
Spring Semester				
*EGR 282	Mechanics: Dynamics	3	0	3
EGR 289	Introduction to Microprocessors	2	0	2
EGR 288	Engineering Science Laboratory II	0	3	1
MAT 282	Differential Equations with Linear Algebra	4	0	4
**— —	Technical Elective	3	0	3
PED	Physical Education Elective	0	2	1
ENG 220	Communication About Values	3	0	3
EGR 200	Orientation	2	0	0
		17	5	17

*Organic Chemistry (CHM 245 and 246) may be substituted by students who are declared Chemical Engineering majors.

**Students who plan to major in Mechanical or Civil Engineering should select EGR 283 Strength of Materials. Students majoring in all other engineering fields should elect EGR 284 Materials Science.

W - Writing Emphasis Course: Two Required.

†One must be a writing emphasis course.

GRADUATATION REQUIREMENT: 71 CREDITS

MECHANICAL ENGINEERING TECHNOLOGY

DEPARTMENT CHAIRPERSON, William G. Kelly
Mechanical Building, Room 117
Telephone 778-5000 ext. 5023

The Mechanical Engineering Technology program at Broome Community College is specifically designed to prepare students in the applied aspects of engineering. Engineering Technology is a vital part of the engineering field. It requires the application of scientific and engineering knowledge and methods combined with practical technical skills in support of engineering activities. The Mechanical Engineering Technology program emphasizes the application of engineering principles to real-world industrial problems utilizing current up-to-date equipment and techniques. Students are prepared for immediate employment or transfer into a four-year Bachelor's degree program.

The continuing thrust for faster and more economical manufacturing methods, more realistic systems and the need for new, clean and consistent sources of energy, has generated a continuing demand for mechanical engineering technicians with a high degree of technical competence.

Mechanical Engineering Technology graduates are able to pursue careers in many segments of industry. Recent graduates have been employed in areas such as process development, product design, quality control, metallurgy, reliability analysis, heat-power, technical sales, purchasing or product development. Job opportunities exist both locally and nationally, with starting salaries averaging over $22,000 per year.

Many of our graduates have pursued Baccalaureate parallel programs which have been designed to facilitate transfer from a two-year to a four-year college. Graduates with a minimum G.P.A. of 2.5 can receive a full two-year transfer of credit towards the requirements for the Bachelor of Technology degree at a number of institutions.

PROGRAM EMPHASES

Engineering Materials
Fluid Mechanics and Thermodynamics
Mechanical Drawing and Design — CAD
Manufacturing Processes and Quality Control

The Mechanical Engineering Technology program at Broome Community College is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

CURRICULUM ADVISORY COUNCIL
MECHANICAL ENGINEERING TECHNOLOGY

PAUL AHRENS, Director of Occupational and Continuing Education — Otsego - Northern Catskill BOCES
FRED BARTHOLOMEW, Marketing Services Manager, Raymond Corporation
LOUIS EVANGELISTI, Supervisor, Retired, Drafting Standards
ROBERT MACCHIARELLA, Senior Staff Engineering, Hardware Systems Engineer, Microflite Simulation Corp.
PETER MAJESTIC, Research & Development, Corning Glass
DAVID MERITHEW, Manager, Mechanical Design, Universal Instruments
RAYMOND PERINE, Vice-President, Retired, NYSEG
RICHARD VLASAK, IBM Corporation

Sequence of Courses: This model is a two year course schedule for students meeting all program requirements and deciding to pursue full time study. Schedules will be redesigned for those requiring preparatory courses or those deciding to pursue part time study.

FIRST YEAR		Hours per Week		Credits per
Fall Semester		Class	Lab	Semester
MET 110	Introduction to Technology	1	0	½
*MAT 161	Pre-Calculus	4	0	4
MET 113	Engineering Drawing I	1	3	2
MET 121	Manufacturing Processes I	2	2	3
†PHY 141	Physics I	3	2	4
ENG 110	Written Expression I	3	0	3
‡— —	Social Science Elective	3	0	3
		17	7	19½
Spring Semester				
CST 122	Scientific Computer Programming - FORTRAN	2	2	3
MET 116	Engineering Drawing II w/CAD	1	3	2
MET 122	Manufacturing Processes II	1	3	2
PHY 142	Physics II	3	2	4
MET 132	Applied Mechanics	4	0	4
ENG 150	Technical Writing	3	0	3
		14	10	18
SECOND YEAR				
Fall Semester				
EET 183	Electricity	2	3	3
*MAT 162	Applied Calculus	4	0	4
MET 235	Strength of Materials	2	3	3
MET 243W	Fluid Mechanics	2	3	3
MET 263	Engineering Statistics and Quality Control	1	2	2
MET 211	Basic Mechanical Design	1	2	2
		12	13	17
Spring Semester				
EET 186	Electronics	2	3	3
MET 238	Mechanical Design	3	3	4
MET 252	Engineering Materials and Industrial Processes	3	3	4
MET 244	Thermodynamics	2	3	3
— —	Social Science Elective	3	0	3
		13	12	17

*or MAT 181-182 Calculus I and II with Analytic Geometry. Prior approval by department Chairperson required.

†Students entering the program without physics may elect to take PHY 100 Preparatory Physics I during the first semester in place of PHY 141 Physics. PHY 141 Physics may be taken during the spring semester and PHY 142 and MET 132 Applied Mechanics during the summer session. This will enable the student to graduate on schedule. PHY 100 Preparatory Physics is not applicable towards the degree.

W - Writing Emphasis Course: Two Required.

‡One must be chosen from ECO 110/111, HIS 130/131, POS 201/204, SOC 111, SOS 111/120/130.

GRADUATION REQUIREMENTS: 71½ CREDITS

INDUSTRIAL TECHNOLOGY (Part-Time Programs)

ASSOCIATE IN APPLIED SCIENCE

CHEMICAL EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses		Credits
MAT 139	Algebra	4
CHM 145	Chemistry	4
ENG 110		3
Additional Courses for Certificate		
CHM 146	Chemistry	4
CHM 291	Organic Chemistry I	3
CHM 292	Organic Chemistry II	3
PHY 141	Physics	4
MAT 140	Trigonometry	4
CST 122	Computer Programming-FORTRAN	3
		32
Remaining Courses for Degree		
PHY 142	Physics	4
CHM 293	Analytical-Instrumental Chemistry I	3
CHM 294	Analytical-Instrumental Chemistry II	3
ENG 150		3
†Social Science Electives		6
Approved Technical Science Electives (see list below)		13
AAS Industrial Technology (Chemical Emphasis) Minimum Credits		64

The following may be taken as approved technical/science courses to meet degree requirements: MAT 162, MAT 181, MAT 182, MAT 264, EET 111, EET 112, EET 125, EET 126, MET 263, CST 113, CST 126, CST 150, CST 170, CST 202, CST 205, CST 211, CST 220, CST 222, CST 225, BIO 111, BIO 112.

†One must be chosen from ECO 110/111, HIS 130/131, POS 201/204, SOC 111, SOS 111/120/130.

W - Writing Emphasis Course: Two Required.

CIVIL EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses		Credits
MAT 139	Alegbra	4
MAT 140	Trigonometry	4
ENG 110	Written Expression I	3
PHY 141	Physics I	4
Additional Courses for Certificate		
MET 132	Applied Mechanics	4
MET 141	Mechanical Drawing I	2
CIV 159	Architectural Drafting	3
CIV 205	Intro to Comp. Graphics with Arch. Applications	3
CST 122	Computer Programming-FORTRAN	3
CAD 150	Basic CADAM	2
		32
Remaining Courses for Degree		
PHY 142	Physics II	4
MET 235	Strength of Materials	3
ENG 150	Technical Writing	3
†Social Science Electives		6
Approved Technical Electives* (see list below)		16
AAS Industrial Technology (Civil Emphasis) Minimum Credits		64

* The following may be taken as approved technical elective courses to meet the degree requirements CIV 111, MAT 162 or MAT 181, CIV 161, CIV 216, CIV 217W, CIV 224, CIV 226, CIV 228 or CIV 231, CIV 238, CIV 240, CIV 268, CAD 211, CAD 253.

Suggested Social Science Courses: ECO 110, ECO 111, SOC 110, PSY 110, ECO 104, PSY 100, SOS 111, SOS 120, SOS 130.

* Students should note that specialty courses like Surveying, Materials Testing and Steel and Reinforced Concrete Design are generally only offered during the day. Students should carefully review the effect of this scheduling on their academic plans.

†One must be chosen from ECO 110/111, HIS 130/131, POS 201/204, SOC 111, SOS 111/120/130.

W - Writing Emphasis Course: Two Required.

ELECTRICAL EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses		Credits
MAT 139	Algebra	4
MAT 140	Trigonometry	4
EET 125	Circuits I	3
ENG 110	Written Expression I	3
Additional Courses for Certificate		
EET 126	Circuits II	3
EET 255	Electronics I	4
MET 141	Mechanical Drawing I	2
CST 122	Computer Programming-FORTRAN (Technical)	3
†Social Science Elective		3
Approved Technical Electives		3
		32
Remaining Courses for Degree		
EET 235	Electrical and Electronics Drawing	2
EET 245	Energy Conversions and Control Systems	4
EET 256	Electronics II	4
EET 257	Electronics III	4
EET 267	Digital Electronic & Microprocessors I	4
PHY 141, 142	Physics	8
ENG 150	Technical Writing	3
†Social Science Elective		3
AAS Industrial Technology (Electrical Emphasis) Minimum Credits		64

Approved Technical Electives: EET 111, EET 112, EET 268, MAT 124, MAT 181, MAT 182, MAT 264, MET 243, MET 132, MET 244, MET 246, MET 253, MET 263, MET 280, MET 285, MET 286, CIV 228, CIV 268, CIV 155, CHM 145, CHM 146, CST 115, CST 126, CST 130, CST 150, CST 200, CST 201, CST 202, CST 222, CAD 150, CAD 151, CAD 230, CAD 252.

Suggested Social Science Courses: ECO 104, ECO 110, ECO 111, PSY 100, PSY 110, SOC 110, SOS 120, SOS 130.

Courses in the fast changing engineering technologies such as Electronics Computers, Energy Conversions and Control Systems and Machine & Controls, cannot be used for degree requirements if they were taken more than 5 years prior to graduation date. One exception to this rule would be the student who has been in the degree program for a number of years and has taken at least one required course every fall and spring semester.

†One must be chosen from ECO 110/111, HIS 130/131, POS 201/204, SOC 111, SOS 111/120/130.

W - Writing Emphasis Course: Two Required.

MANUFACTURING TECHNOLOGY EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses		Credits
*MAT 139	Algebra	4
*MAT 140	Trigonometry	4
MET 121	Manufacturing Processes I	3
MET 141	Mechanical Drawing I	2
ENG 110	Written Expres	3

Additional Courses for Certificate		
MET 122	Manufacturing Processes II	2
PHY 141	Physics I	4
MET 142	Mechanical Drawing II with CAD	2
MET 263	Engineering Statistics and Quality Control	2
MET 112	Metrology	2
MET 236	Statics and Strength of Materials	4
		32

Remaining Courses for Degree		
EET 125	Circuits I	3
MET 211	Computer Aided Drafting	3
MET 220	Programming CNC Machine Tools	3
MET 286	Production Control	2
MET 223	Computer Integrated Machining	3
EET 126	Circuits II	3
MET 252	Engineering Materials	4
SQC 111	Acceptance Sampling	3
*****	Social Science	6
ENG 150	Technical Writing	3
		33

AAS Industrial Technology (Manufacturing Technology) Minimum Credits 65

* Must have a minimum of 4 hours of Mathematics as a requirement for the degree if background makes it unnecessary to take MAT 139 Algebra and MAT 140 Trigonometry.

†One must be taken from ECO 110/111, HIS 130/131, POS 201/204, SOC 111, SOS 111/120/130.

W - Writing Emphasis Course: Two Required.

MECHANICAL EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses		Credits
*MAT 139	Algebra	4
*MAT 140	Trigonometry	4
MET 121	Manufacturing Processes I	3
MET 141	Mechanical Drawing I	2
ENG 110	Written Expres	3

Additional Courses for Certificate		
MET 122	Manufacturing Processes II	2
PHY 141	Physics I	4
MET 132	Applied Mechanics	4
MET 142	Mechanical Drawing II with CAD	2
MET 112	Metrology	3
MET 263	Engineering Statistics and Quality Control	2
		33

Remaining Courses for Degree		
CST 122	FORTRAN	3
PHY 142	Physics II	4
MET 253	Engineering Materials and Industrial Processes	3
ENG 150	Technical Writing	3
MET 211	Computer Aided Drafting	2
******	Social Science	6
MET 235	Strength of Materials	3
MET 220	Programming CNC Machine Tools	3
		27

4 Crds. Technical Electives

AAS Industrial Technology (Mechanical Emphasis) Minimum Credits 64

Approved Technical Electives:
MET 118, 125, 221, 222, 223, 224, 238, 244, 246, 248, 280, 285, 286, 287, EET 111, 112, 125, 126, 255, 256, 257, CAD 151, 212, 213, 214, 222, 252, 253, 254, CHM 145, 146, MAT 181, 182.

* Must have a minimum of 4 hours of Mathematics as a requirement for the degree if background makes it unnecessary to take MAT 139 Algebra and MAT 140 Trigonometry.

†One must be taken from ECO 110/111, HIS 130/131, POS 201/204, SOC 111, SOS 111/120/130.

W - Writing Emphasis Course: Two Required.

PRODUCTION MANAGEMENT EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed:

Introductory Courses		Credits
*MAT 139	Algebra	4
*MAT 140	Trigonometry	4
MET 121	Manufacturing Processes I	3
MET 141	Mechanical Drawing I	2
ENG 110	Written Expres	3

Additional Courses for Certificate		
MET 122	Manufacturing Processes II	2
PHY 141	Physics I	4
MET 142	Mechanical Drawing II with CAD	2
MET 285	Time, Motion & Wage Study	2
BUS 255	Industrial Labor Relations	2
MET 263	Engineering Statistics and Quality Control	2
MET 286	Production Control	2
		32

Remaining Courses for Degree		
CST 122	FORTRAN	3
ENG 150	Technical Writing	3
MET 280	Management Decisions	2
MET 287	Plant Layout and Materials Handling	2
MET 211	Computer Aided Drafting	2
******	Social Science	6
MET 112	Metrology	3
BUS 252	Supervision of Personnel	2
MET 220	Programming CNC Machine Tools	3
BUS 246	Principles of Management	3
		29

3 Crds. Technical Electives

AAS Industrial Technology (Production Management) Minimum Credits 64

Approved Technical Electives:
MET 118, 125, 132, 221, 222, 223, 224, 235, 238, 243, 244, 246, 248, 253, EET 111, 112, 125, 126, 255, 256, 257, CAD 151, 212, 213, 214, 222, 252, 253, 254, CHM 145, 146, MAT 181, 182.

* Must have a minimum of 4 hours of Mathematics as a requirement for the degree if background makes it unnecessary to take MAT 139 Algebra and MAT 140 Trigonometry.

†One must be taken from ECO 110/111, HIS 130/131, POS 201/204, SOC 111, SOS 111/120/130.

W - Writing Emphasis Course: Two Required.

QUALITY ASSURANCE EMPHASIS

SUGGESTED SEQUENCE: Students may select courses from any of the categories, but it is suggested that these sequences be followed to ensure that the proper prerequisites have been completed.

Introductory Courses		Credits
MAT 139	Algebra	4
MAT 140	Trigonometry	4
MET 124	Statistics I	3
MET 141	Engineering Drawing I	2
ENG 110	Written Expression I	3

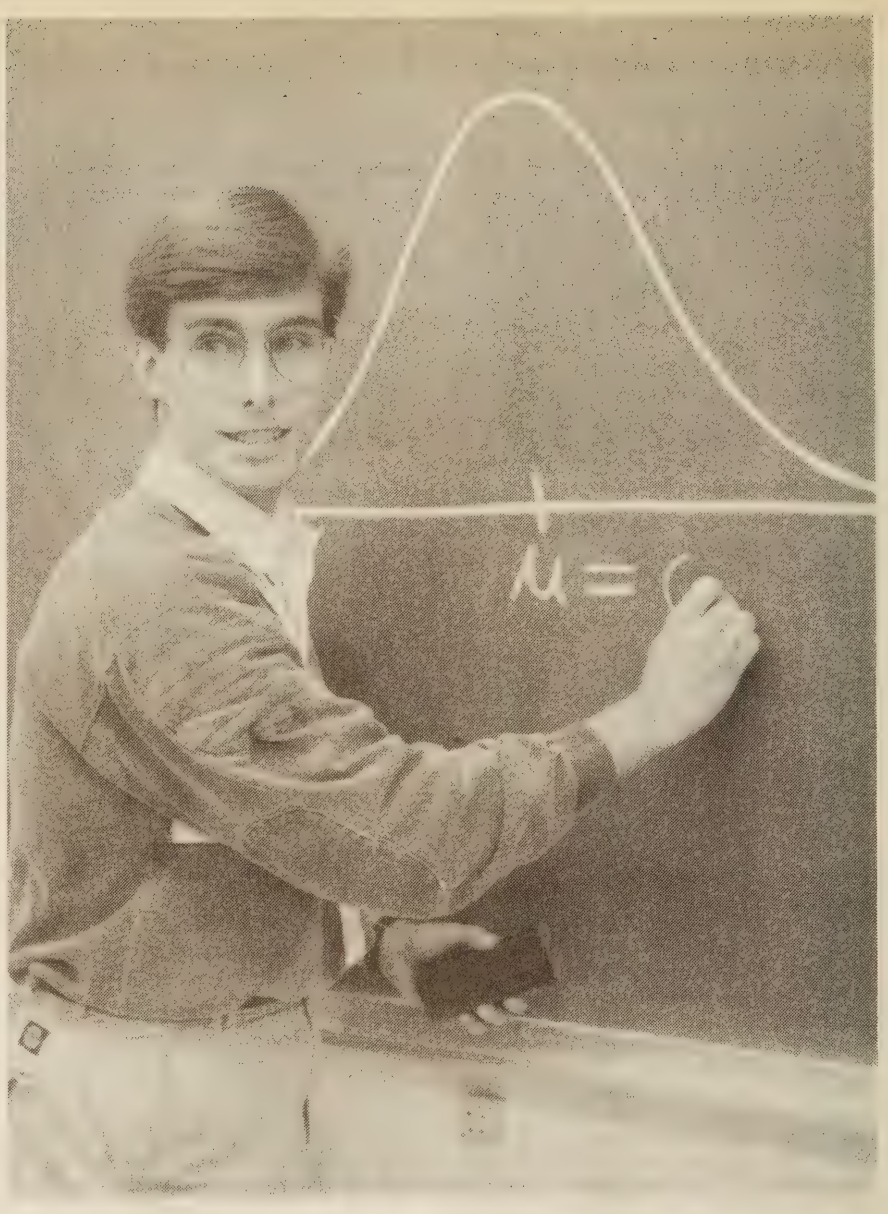
Additional Courses for Certificate		
CST 105	Understanding Computers	3
SQC 110	Total Quality Control	3
MET 121	Manufacturing Processes I	3
SQC 111	Acceptance Sampling	3
SQC 112	Metrology	3
SQC 113	Statistical Process Control	3
		34

Remaining Courses for Degree		
MAT 224	Statistics II	3
PHY 141	Physics I	4
CHM 120	Fundamentals of Chemistry	4
MET 122	Manufacturing Processes II	2
ENG 150	Technical Writing	3
†Social Science Electives		6
SQC 244	Reliability and Life Testing	3
MAT 245	Intro to Design of Experiments	3
EET 183	Applied Electricity	3
		31

AAS Industrial Technology
Quality Assurance Emphasis
Minimum Credits 65

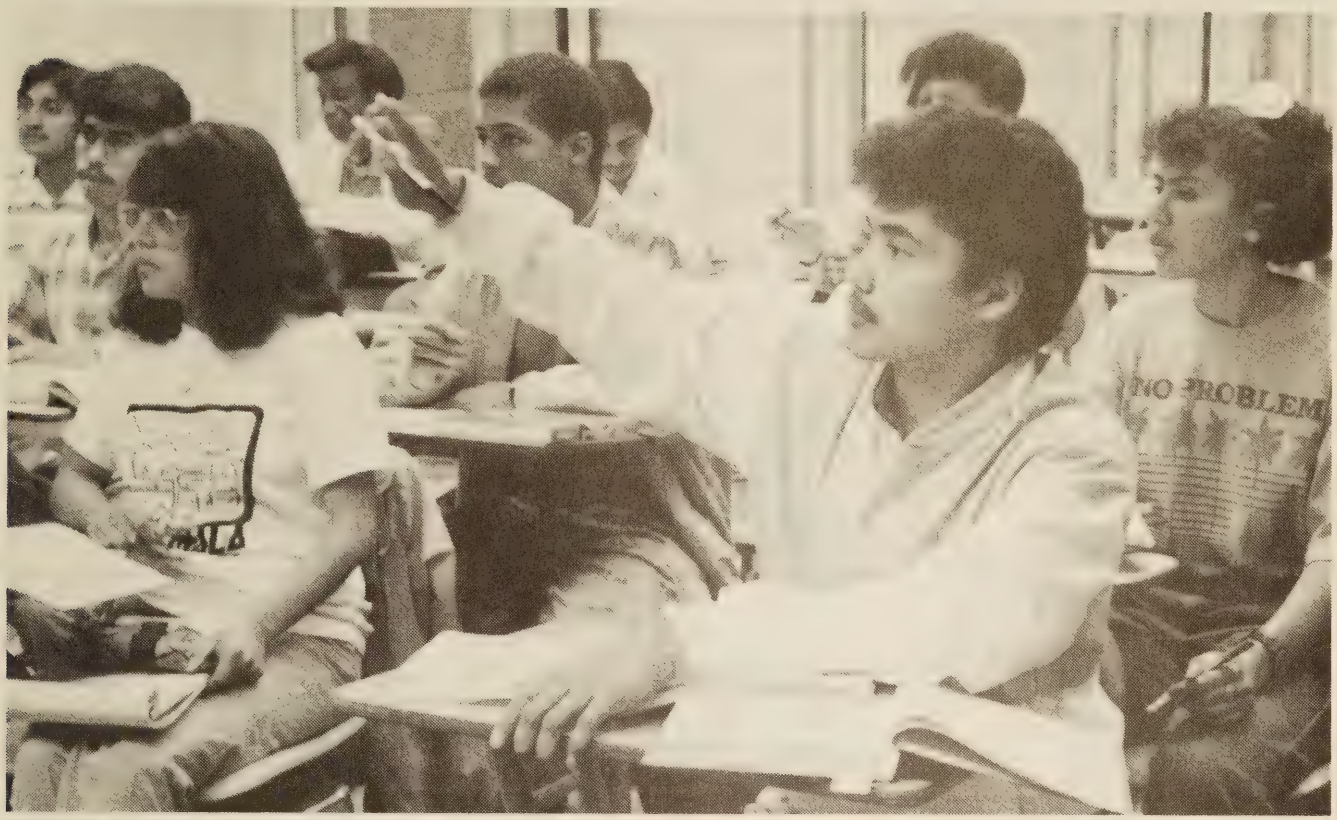
†One must be taken from ECO 110/111, HIS 130/131, POS 201/204, SOC 111, SOS 111/120/130.

W - Writing Emphasis Course: Two Required.



PART 3

Course Descriptions



PROGRAM-IDENTIFYING NUMBERS

State regulations require a listing of all curriculums, together with the degrees they lead to and their HEGIS code numbers. HEGIS stands for Higher Education General Information Survey, and the HEGIS numbers for each curriculum are official federal and state designations. Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain aid awards.

HEGIS	Degree	Curriculum
5001	CERT	Business Skills
5002	AAS	BUS-Accounting
0506	AS	BUS-Business Administration
5004	AAS	BUS-Marketing Management & Sales
5005	CERT	Office Technologies
5005	AAS	BUS-Secretarial Science-Word Processing
5005	AAS	BUS-Secretarial Science-Executive
0508	AAS	Hotel and Restaurant Management
5008	AS	Communication and Media Arts
5012	CERT	Interior Design
5099	CERT	Paralegal Assistant
5099	AAS	Paralegal
5099	AAS	Travel and Tourism
5101	AS	Computer Science
5101	AAS	Data Processing
5104	AAS	Computer Technology
5203	AAS	Dental Hygiene
5205	AAS	Medical Laboratory Technology
5207	AAS	Radiologic Technology
5208	AAS	Nursing
5213	AAS	Medical Record Technology
5214	AAS	Medical Assistant
5219	AAS	Physical Therapist Assistant
5305	AAS	Chemical Engineering Technology
5309	AAS	Civil Engineering Technology
5310	AAS	Electrical Engineering Technology
5312	CERT	Industrial Technology
5312	AAS	Industrial Technology
5315	AAS	Mechanical Engineering Technology
5404	CERT	Dietary Manager
5503	CERT	Early Childhood
5503	AAS	Early Childhood
5505	CERT	Criminal Justice
5505	AAS	Criminal Justice - Police
5507	CERT	Fire Protection Technology
5507	AAS	Fire Protection Technology
0901	AS	Engineering Science
4901	CERT	Liberal and General Studies
4901	AS	Liberal and General Studies
4901	AA	Liberal and General Studies
4901	AS	Individual Studies
4901	AAS	Individual Studies

NOTE — "CERT" means certificate, not a degree.

COURSE DESCRIPTIONS

The offering of any course is subject to sufficient enrollment.

- Courses numbered from 100-199 are generally first level courses; those numbered 200-299 are usually second level.
- The number of credits is listed in parenthesis after the course title.
- The number of lecture and/or laboratory hours per week and any prerequisites are listed after the course descriptions.
- COURSES ARE LISTED IN ALPHABETICAL ORDER BY CALL LETTERS.

Anthropology - ANT
Art - ART
Banking - BNK
Biology - BIO
Business - BUS
Cardiopulmonary Resuscitation - HSV
Chemistry - CHM
Civil - CIV
Communications - COM
Computer Graphics - CAD
Computer Studies - CST
Criminal Justice - CRJ
Dental Hygiene - DEN
Dietary Manager - DIA
Early Childhood - ECE
Economics - ECO
Electrical - EET
Engineering - EGR
English - ENG, ESL
Fire Protection - FRS
French - FRE
Geography - GEO
German - GER
History - HIS
Human Development - SAC
Humanities - HUM
Interior Design - INT
Italian - ITA
Learning Skills - LRS
Literature - LIT
Mathematics - MAT
Mechanical - MET
Medical Assistant - MDA
Medical Laboratory - MLT
Medical Records - MRT
Music - MUS
Nursing - ADN
Office Technologies - DOT
Paralegal - PLA
Philosophy - PHI
Physical Education - PED
Physical Science - PHS
Physical Therapist - PTA
Physics - PHY
Political Science - POS
Psychology - PSY
Quality Assurance - SQC
Radiologic - RAD
Reading Skills - RDG
Russian - RUS
Sign Language - HUS
Social Science - SOS
Sociology - SOC
Spanish - SPA
Speech - SPK
Theater - THR
Tourism and Hospitality - TAE

- All asterisked (*) courses are taught evenings only and when enrollment permits.
- All (†) courses carry separate grades for lecture and laboratory.
- All (‡) courses are combined lecture-laboratory courses and final grade depends on successful completion of both parts.

ADN 100 Meeting Basic Human Needs (6)

In Basic Human Needs, the student is introduced to the conceptual framework upon which the curriculum is designed. The needs approach, based on Maslow's Hierarchy of Human Needs, is emphasized. This is the basis for applying the nursing process to the delivery of patient care within the adult life cycle. Biopsychosocial concepts are used to present the holistic human within varied cultures. Emphasis is placed on the maintenance of homeostasis based on the wellness/illness continuum. The student is introduced to the basic concepts of pharmacology. Class content and skills learned in nursing skills laboratory are applied during clinical laboratory experiences. ADN 100C runs concurrently with lecture component and successful achievement is required.
4 Class Hours/6 Clinical Hours

ADN 102 Meeting Mobility Needs (5)

This course focuses on the concepts of immobility, incorporating the nursing process. Maslow's Hierarchy of Needs and the life cycle. Neurologic, orthopedic and sensory dysfunctions are explored. Perioperative concepts including the psychophysiologic aspects of pain are included. Stages of illness and the physiology of disturbances of body temperature are presented. Autoimmune diseases and their nursing implications are explored. the nursing process is used to correlate class theory, nursing skills and clinical skills. This course builds on the student's prior knowledge of anatomy and physiology. ADN 102C runs concurrently with lecture component and successful achievement is required.
3 Class Hours/6 Clinical Hours; Prerequisites: ADN 100 Meeting Basic Human Needs and BIO 131 Human Biology I

ADN 103 Nursing Issues I (1)

Nursing Issues are designed to explore, in detail, critical thinking, analytical writing, decision making, values clarification and the setting of priorities within the context of ethical, legal and cultural influences impacting on self and the practice of nursing. Assertiveness and management skills will be explored and applied to nursing practice situations. Emphasis will be on personal accountability and the management of multiple patient care situations. Writing Emphasis Course.
2 Seminar Hours; Prerequisite: ADN 100 Meeting Basic Human Needs

ADN 204 Regulatory Concepts (4½)

This course focuses on the nursing process and Maslow's Hierarchy of Needs across the life cycle. Stress, both physical and non-physical is discussed as how it affects and is effected by human physiology and pathology.
Mechanisms of normal fluid and electrolyte control are presented. The more common disturbances of body fluid and electrolytes are explored as a means of applying the nursing concepts of prevention of client problems, maintenance of existing client strengths and restoration of clients to an optimum level of health. Endocrine function is reviewed and the effects of dysfunction are presented. The nursing process is used to correlate class theory, nursing skills, and clinical skills. This course builds on the student's prior knowledge of anatomy and physiology. ADN 204C runs concurrently with lecture component and successful achievement is required.
3 Class Hours/4.5 Clinical Hours; Prerequisites: ADN 102 Meeting Mobility Needs, BIO 132 Human Biology II and Development Psych.

ADN 205 Psychological Concepts I (4)

This course will focus on mental health concepts, providing a therapeutic environment and applying the nursing process using Maslow's Hierarchy of Needs. Therapeutic relationships (individual/group) are established in the care of clients with affective and thought disorders. These relationships are based and principles of psychiatric nursing using the wellness/illness continuum as well as communication theory. Class content is applied across the life cycle, incorporating cultural and teaching/learning needs during the student's experience on an inpatient psychiatric unit as well as integrated into all other clinical laboratory experiences. ADN 205C runs concurrently with lecture component and successful achievement is required.

3 Class Hours/3 Clinical Hours; Prerequisites: ADN 102 Meeting Mobility Needs, BIO 132 Human Biology II and Developmental Psych

ADN 206 Concepts of Obstruction and Inflammation (4½)

This course focuses on the concepts of obstruction and inflammation, incorporating the nursing process, Maslow's Hierarchy of Needs and the life cycle. Theories of communicable disease and infection are presented as well as the concepts of autoimmune and allergic responses. The digestive tract is used to illustrate broad concepts of infection, inflammation and obstruction. the physiology of neoplastic growth is explored as it relates to both benign and malignant cells. The nursing process is used to correlate class theory, nursing skills and clinical skills. This course builds on the student's prior knowledge of anatomy and physiology. ADN 206C runs concurrently with lecture component and successful achievement is required.

3 Class Hours/4.5 Clinical Hours; Prerequisite: ADN 204 Regulatory Concepts

ADN 207 Oxygenation Concepts (4½)

This course focuses on the concept of oxygenation, incorporating the nursing process, Maslow's Hierarchy of Needs and the life cycle. All systems responsible for maintaining adequate systemic oxygen are explored. Also considered is the phenomenon of compensation between body systems. the interrelatedness of stress and the body's demand for oxygen becomes a central theme throughout the course. Common disruptions in the related systems are presented as a means of establishing the nursing concepts of prevention and the restoration of clients to their optimum level of health. The nursing process is used to correlate class theory, nursing skills and clinical skills. This course builds on the student's prior knowledge of anatomy and physiology. ADN 207C runs concurrently with lecture component and successful achievement is required.

3 Class Hours/4.5 Clinical Hours; Prerequisite: ADN 204 Regulatory Concepts

ADN 208 Psychological Concepts II (4)

This course will focus on mental health concepts, providing a therapeutic environment and applying the nursing process using Maslow's Hierarchy of Needs. The concepts of therapeutic relationships (individual/group), are applied in the care of clients with neuroses, chemical dependency, social aggression and pediatric mental illness/retardation. These relationships are based on principles of psychiatric nursing using the wellness/illness continuum and crisis intervention and communication theories. Additionally, the history of psychiatric nursing and the legal implications regarding the care and rights of psychiatric clients will be examined. Class content is applied across the life cycle, incorporating cultural and teaching/learning needs during the student's experiences on an inpatient psychiatric unit as well as integrated into all other clinical laboratory experiences. ADN 208C runs concurrently with lecture component and successful achievement is required.

3 Class Hours/3 Clinical Hours; Prerequisite: ADN 205 Psychological Concepts I

ADN 210 Family Centered Maternity Nursing (4½)

The focus of this course is Family Centered Maternity Nursing. The maternal cycle is presented as a developmental task of the young adult, with emphasis on preparation for parenthood, and the experience of labor and delivery as a normal physiological process. The reality of parenthood, and the psychosocial and cultural implications of childbearing on the family and middle-aged woman are also considered. The effects of childbirth on the adolescent and middle-aged woman are also considered.

Although the effects of a normal pregnancy on the family are emphasized, selected physical and behavioral problems for the mother and common problems of the newborn are discussed.

Through application of the nursing process using Maslow's Hierarchy of Needs, the student will correlate class, nursing skills and clinical theory and skills. The course builds on the student's prior knowledge of anatomy and physiology.

During clinical practice the student will utilize hospital resources and community services available to aid individuals in their search for an optimum level of wellness. ADN 201C runs concurrently with lecture and component and successful achievement is required.

3 Class Hours/4.5 Clinical Hours; Prerequisites: ADN 102 Meeting Mobility Needs, BIO 132 Human Biology II and Developmental Psych.

ADN 293 Assessment Skills I (1)

This course is designed to expand basic physical assessment skills. Content incorporates assessment of normal anatomy and physiology, and changes of the human in normal development and the disease process. A practice lab is included.

1 Class Hour. S/U Grade given.

ADN 294 Assessment Skills II (1)

This course is designed to expand basic physical assessment skills. Content incorporation assessment of normal anatomy and physiology, and changes of the human body in normal development and the disease process. A practice lab component is included.

1 Class Hour. S/U Grade given.

ADN 297 Nursing Seminar II (1)

Nursing Issues II is a broad survey course examining career planning, employment strategies, nursing history and nursing practice issues. Students are given an opportunity to assess their knowledge in preparation for the NCLEX licensure examination.

2 Seminar Hours; Prerequisites: ADN 103 Nursing Issues I, ADN 204 Regulatory Concepts, ADN 205 Psychological Concepts I, and ADN 210 Family Centered Maternity Nursing

ADN 298 Nursing Issues III (1)

Transfer and advance placement students meet in a seminar setting to facilitate transition into the nursing program. The nursing department philosophy, use of the classroom bibliography and objectives, and nursing process are discussed. Students are provided an opportunity to practice and demonstrate selected nursing skills. Individual conferences are held with each student to assess progress.

Prerequisites: Students in this course must have met requirements for transfer or have passed the required challenge examination for advance placement.

ADN 299 Independent Study (1-3)

An individual student project in the nursing field which is beyond the scope of requirements of the courses offered by the department conducted under the direction of a nursing faculty member and approved by the department chairperson. Independent study is available to students who have completed one semester of Professional Nursing Courses.

ANT 110 Physical Anthropology and Archaeology (3)

Introduction to human evolution, variation and prehistory. The Darwinian Revolution, mechanisms of evolution, the fossil record, domestication of plants and animals, the origin of human civilization. Prehistory topics may include the Americas, Africa, the Middle East, Asia.

3 Class Hours

ANT 111 Cultural Anthropology (3)

Introduction to the study of culture as the behavioral adaptation unique to human societies. Cultural characteristics shared by all humans and major variations found among specific groups. Explanations for rules of social interaction in common activities, the social functions of institutions, language is a culturally defined system of communication, modernization in our own and third world societies.

3 Class Hours

ANT 299 Independent Study (1-3)

An individual student project in anthropology which is beyond the scope of requirements of the course offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.

Prerequisite: 3 semester hours in Anthropology

ART 102 History of Western Art I (3)

An overview of Western Art from 25,000 BC to about 1550 AD. Study of man's made objects, paintings, sculpture, drawings, graphics, ceramics and some architecture to reveal the relationships between these objects and the history of civilizations. Slide lecture format.

3 Class Hours

ART 103 History of Western Art II (3)

Survey of the visual arts in Western culture from the late Renaissance until the 1990s to reveal how art mirrors life and reflects its ideals. Special emphasis on American painting and sculpture. Slide lecture format and field trips.

3 Class Hours

ART 104 Oriental Art (3)

This course is intended to be a general survey of Oriental Art in the Far East: the art and architecture of India, Japan and China with supplementary study of the cultural traditions of Tibet and Indonesia, Burma and Thailand. An introduction to both monuments and cultural traditions, especially Buddhism, the course is intended for the beginning student with a limited background in Art History.

3 Class Hours

ART 105 Introduction to Two-Dimensional Design (3)

Introduction to design involves the student with investigation of visual perception and organization. The student is expected to become more fully equipped to understand and work with design concepts through heightened physical and sensory awareness, experimentation with a variety of media and intellectual comprehension of text, lecture and visual examples. Line space, illusion, texture, color and form are explored.

2 Class Hours, 2 Studio Hours.

ART 106 Introduction to Three-Dimensional Design (3)

Developing sensitivity and awareness of our spatial environment is the object of this course. Aesthetic and functional elements of three-dimensional design are explored. Through reading, projects, lectures and field trips, techniques are explored to assist in heightening awareness. This enables the student to understand the functional and aesthetic examples of the three-dimensional environment. Emphasis is placed on studio projects.

2 Class Hours, 2 Studio Hours

ART 108 History of Western Architecture I (3)

Overview of 40 centuries of building, beginning in Ancient Egypt. The student follows the political, technological, religious and social movements that have influenced the major design styles, outstanding architects and designer of each era until the end of the Renaissance (1650s). Slide-lecture format with site visits.

3 Class Hours

ART 109 History of Western Architecture II (3)

Overview of the history of buildings from the Baroque period (1650s) to the present. Students achieve an historical perspective on and understanding of the development and evolution of architectural design. Special emphasis is given to local buildings and their relationships to national styles.

3 Class Hours

ART 112 Beginning Photography (3)

Basics of camera design and operation, plus the fundamentals of photographic visualization and composition: line, form, color, light shadow. Darkroom procedures, film processing, basic printmaking, selecting printing techniques. (Students must have their own 35mm single lens reflex camera and should expect to pay for their own photographic materials — about $60.)

2 Class Hours, 2 Laboratory Hours

ART 212 Intermediate Photography (3)

Systems of precise exposure and processing control. Creative darkroom techniques including selecting toning, hand coloring and high contrast variation. Portfolio development. Introduction to color; color processes and printing from color slides. (Students must have their own 35mm single lens reflex camera and should expect to pay for their own photographic materials — about $60.)

2 Class Hours, 2 Laboratory Hours; Prerequisite: COM 110 or permission of instructor

ART 115 Beginning Drawing (3)

Intensive drawing instruction in charcoal, pencil, pen and ink, pastel and mixed media. Still-life composition, use of formal art elements and some figure drawing.

6 Studio Hours

ART 116 Painting I (3)

Beginning painting instruction and practice of oil painting, still-life, landscapes.

6 Studio Hours; Prerequisite: ART 115 Drawing or portfolio review

ART 140 Printmaking (3)

This three-part course will begin with an introduction to printmaking through the methods of collograph and monotype printing. Then linecuts and woodcuts will be developed, and there will be a concentration on the silkscreen process. The third part will be an historical survey of printmaking and its techniques. This will be accomplished through visits to local print collections.

6 Studio Hours

ART 150 Graphic Rendering (3)

Graphic techniques developed for visual presentation of architectural, industrial and aesthetic forms. Studio projects stress creation of the representational image using perspective, color, texture and light. Applicable to advertising and illustration of ideas and products.

2 Lecture Hours, 2 Lab Hours; Prerequisite: ART 105 Introduction to Two-Dimensional Design

ART 215 Painting II (3)

Continuation of painting instruction and practice done in ART 116 Painting I.

6 Studio Hours; Prerequisite: ART 116 Painting I or portfolio review

ART 217 Advanced Drawing (3)

Advanced course presenting new media techniques and concepts; life drawing emphasized.

6 Studio Hours; Prerequisite: ART 115 Drawing or portfolio review

Independent Study: Art (1-3)

ART 296 Printmaking
ART 297 Three-Dimensional Design
ART 298 Studio Art
ART 299 Art History

An individual student project concerned with advanced work in a specific area of art. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.

Prerequisite: 3 semester hours of college level work in Art

BIO 102 Preparatory Biology (4)

A preparatory course for students with no previous biology or laboratory science experience and for students needing additional background. Especially for prospective health science students. Register with advisement only. Two (2) credits can be applied to the Associate of Arts degree.

3 Lecture Hours, 3 Laboratory Hours

BIO 111 General Biology I (4)

Principles of evolution and ecology as unifying themes in biology. Evolutionary processes and ecological adaptations illustrated by plant and animal diversity. Cellular life processes. Current environmental problems. The laboratory includes physically demanding field trips. Accommodations can be made for students with disabilities.

3 Class Hours, 3 Laboratory Hours

BIO 112 General Biology II (4)

Principles of evolution and ecology as unifying themes in biology. The human animal and its systems. Concepts of animal behavior. Classical genetics, current concepts of gene function and human genetics. Organismal growth and development. Current environmental problems. The laboratory includes physically demanding field trips. Accommodations can be made for students with disabilities.

3 Class Hours, 3 Laboratory Hours

BIO 120 Human Sexuality (3)

Explores information about sexual attitudes, relationships, sexual anatomy, contraception, sexually transmitted disease, sexual physiology and dysfunction. Course aims to make students feel more comfortable thinking and talking about sex and to prepare them to make rational decisions about this important aspect of their lives.

3 Class Hours

BIO 131 Human Biology I (4)

Normal structure (gross and microscopic) and function of the skeletal, muscular and nervous systems. Emphasis on physiology in lectures and on anatomy in laboratory, stressing those aspects which have greatest relevance to the student's curriculum.

3 Class Hours, 2 Laboratory Hours

BIO 132 Human Biology II (4)

A continuation of BIO 131 Human Biology I covering the circulatory, respiratory, digestive, urinary, reproductive and endocrine systems. Emphasis on physiology in lectures and on anatomy in laboratory, stressing those aspects which have greatest relevance to the student's curriculum.

3 Class Hours, 2 Laboratory Hours; Prerequisite: BIO 131 Human Biology I or permission of instructor

BIO 140 Pathophysiology (3)

Symptoms, syndrome and etiology of pathogenic processes affecting the function and structure of the body.

3 Class Hours; Prerequisite: BIO 132 Human Biology

BIO 150 Microbiology (4)

The biology of the common bacteria and related microorganisms. General microbiology including asepis, disinfection, sterilization, cultivation, pathogenicity, resistance, identification.

3 Class Hours, 3 Laboratory Hours

BIO 151 Aquatic Biology (4)

A study of how light, temperatures and water chemistry influence the plants and animals which live in ponds, lakes, rivers and estuaries. Current and future ecology. Local, regional and national weather-related problems including pollution, waste water treatment, ground water contamination, acid rain, water recycling, salt water encroachment, wetland destruction.

3 Class Hours, 2 Laboratory Hours

BIO 160 Microbiology (3)

Position of microorganisms in the biological world, as well as their cultivation and identification. Asepis, disinfection and sterilization. Disease transmission and the human elements in defense. For Dental Hygiene Students.

2 Class Hours, 3 Laboratory Hours

BIO 170-199 Special Topics in Biology (1-2)

Special courses covering particular topics in the biological sciences beyond the scope of the normal course offerings.

BIO 171 Physiology of Exercise (1)

Designed to develop an understanding and appreciation for the role of consistent exercise in maintaining good health, the interrelationship of the muscular, cardiovascular, respiratory and digestive systems and the net effect of training on these systems.

1 Class Hour

BIO 200 Ecology: The Everglades (4)

A scientific yet sensitive look at one of the world's rare and endangered wilderness areas. Everglades ecology is studied through an extensive wilderness camping experience in Everglades National Park, involving a minimum of 90 hours of classroom and field instruction. Offered during the January Intermission.

3 Class Hours, 3 Laboratory Hours; Prerequisite: College Biology

BIO 299 Independent Study (1-3)

An individual student project in a biological field which is beyond the scope of requirements of the courses offered by the department conducted under the direction of faculty member and approved by the department chairperson. Independent Study is available to students who have a minimum of three semester hours of biology.

BNK 120 Sales Management (1)

Designed for new and prospective retail managers. Examines the responsibilities of the sales manager. Selling techniques, establishing market goals and increasing sales results.
1 Class Hour

BNK 123 Product Knowledge: Key to Successful Selling (1)

Gives an understanding of the range of financial services a bank can offer. Also explains the needs these products meet. The course integrates the concept of cross-selling with the product knowledge required to successfully cross-sell.
1 Class Hour

BNK 124 Managing Sales in the Branch (1)

Helps sharpen skills in sales management and apply practical sales techniques. Designed to enable students to motivate and equip sales staff to become an effective sales team.
1 Class Hour

BNK 130 Written Communication for Bankers (1)

An overview of the steps involved in creating successful written communications. Emphasis on letters and written reports.

BNK 140 Statement Analysis (3)

Basic concepts and skills of statement analysis. Examination of ratio analysis, trend analysis, fund and cash flow analysis. Pro forma statements, peak debt position, cash forecasting and working capital analysis are also covered.
3 Class Hours

BNK 150 Customer Service for Bank Personnel (1)

For customer contact personnel, this practically based course provides an opportunity to improve communication skills as they relate to banking needs. Included are elements of professionalism, handling difficult situations and interpersonal communication skills.
1 Class Hour

BNK 160 Personal Banker (1/2)

Designed for customer contact personnel. Examines customer needs at various stages of life and develops strategies designed to meet those needs.
1/2 Class Hour

BNK 161 Financial Planning for Bankers (3)

Designed for all levels of bank personnel, this course will provide a general overview of the financial planning process and its applications. Application of financial planning concepts to personal financial decisions.
3 Class Hours

BNK 162 Deposit Operations (2)

Examines the U.S. payment system of today and tomorrow. Bank deposit-taking activities, management of deposited funds, trends in EFT.
2 Class Hours

BNK 163 Essentials of Banking (1/2)

Orientation to the essential principles, concepts and operations of banking. Economic and organizational aspects of banking, the asset/liability management process, bank products and service
1/2 Class Hour

BNK 164 Personnel and the Law (1/2)

An introduction to laws pertaining to banking's personnel policies and procedures. Civil Rights Act, Equal Pay Act, EEO, Vietnam Era veterans' legislation.
1/2 Class Hour

BNK 165 Bank Security (1/2)

Designed for experienced customer contact personnel. Examines bank security issues — bank card fraud, bomb threats, extortion, embezzlement.
1/2 Class Hour

BNK 168 Principles of Banking (3)

A core course that examines all aspects of banking. A comprehensive introduction to today's diversified bank services. Bank accounting, pricing, profitability, personnel and security functions.
3 Class Hours

BNK 171 Bank Cards (3)

A thorough overview and update of the bank card industry. History and development of the card, operational aspects, legal and regulatory issues, and implications for the future of the card are discussed in depth.
3 Class Hours

BNK 172 Real Estate Finance for Bankers (3)

An introductory course highlighting sources of mortgage credit. Analysis of mortgage credit and real estate investment. Appraisal of residential and income-producing property, construction loan administration and federal assistance in the mortgage market.
3 Class Hours

BNK 173 Marketing for Bankers (3)

A thorough examination of basic marketing principles and practices and their application to the banking industry. Designed for entry level through mid-management level employees.
3 Class Hours

BNK 174 Money & Banking (3)

Basic economic principles as they relate to banking. This course, designed for bank personnel in customer contact positions, management trainees and mid-management entry personnel, provides the foundation for further banking study.
3 Class Hours

BNK 176 Law and Banking Principles (3)

Sources and applications of banking law. Torts and crimes, contracts, real and personal property, bankruptcy, legal implications of consumer lending.
3 Class Hours

BNK 179 Management Fundamentals/Banking (3)

The art and science of management centered around the basic management function of planning, organizing, lending and controlling. A student-oriented format utilizing case studies and discussion.
3 Class Hours

BNK 181 Investment Basics and Beyond (3)

Introductory course for trust department and retail bank personnel. The securities market, investment alternatives and trust department investment operations are examined in detail. Also covered are investment techniques, portfolio management and practical applications.
3 Class Hours

BNK 182 Consumer Lending (3)

Designed for entry level and consumer credit personnel. An overview of consumer credit. Evaluating credit risks, consumer credit policy, servicing and collecting loans, consumer compliance, documentation, portfolio management and marketing.
3 Class Hours

BNK 183 Supervision (3)

Helps new or potential supervisors become better managers. Emphasis is placed on the broad perspective of supervision. Combines new insights with the interpersonal skills required of today's supervisors.
3 Class Hours

BNK 185 Corporate Banking (3)

A pragmatic approach to understanding the lending environment within a bank. The course provides the less experienced commercial lender with a firm grasp of the sequential nature of the lending process. Emphasis is on a practical technical approach.
3 Class Hours

BNK 186 Preparing for Supervision (1)

For the bank employee considering the move to a supervisory role, knowledge and practice in areas such as leadership, motivation, productivity and communication.
1 Class Hour

BNK 188 Knowing the Market (1)

For new and prospective retail managers, a look at changing bank culture in an era of high technology. Identifying bank and non-bank competition, market segmentation and target market.
1 Class Hour

BNK 190 Problem Loans (3)

Problem loan prevention is stressed by examining common mistakes which cause problem loans. Effectively dealing with problem loans and minimizing losses examined through the use of case studies.
3 Class Hours

BNK 191 Selling Skills for Bankers (1)

An examination of the skills necessary for customer contact personnel to sell bank services and meet customer needs. Development of specific selling techniques and positive attitude.
1 Class Hour

BNK 192 Bank Management (3)

For all levels of bank management this course presents a discussion of bank financial statements, an overview of asset liability management and a thorough discussion of deposit functions, lending short-term funds management and capital management.
3 Class Hours

BNK 198 Law and Banking: Applications (3)

An introduction to laws pertaining to secured transactions, letters of credit and the bank collection process. Check losses, collateral, perfection and default.
3 Class Hours

BNK 199 Analyzing Financial Statements (3)

For the bank lender/credit analyst. How financial data is generated and its limitations. Flow of business funds, selecting and interpreting financial ratios.
3 Class Hours; Prerequisite: BUS 100 Accounting I and BUS 101 Accounting II

BUS 100 Accounting I (4)

Introduction to accounting principles and procedures necessary to complete the accounting cycle. How computers are used in accounting systems. Emphasis on journals, ledgers and financial statements. Accounting for merchandising transactions, valuation of inventories and payroll.
4 Class Hours

BUS 101 Accounting II (4)

Expansion of the fundamental concepts and procedures of accounting. How computers can be applied to accounting systems. Emphasis on internal control, voucher systems and cash transactions, receivables and payables. The acquisition, depreciation and disposal of plant assets. Accounting methods and procedures relating to partnerships and the corporate form of business organizations. Manufacturing with emphasis on the special problems and additional accounting procedures to measure, control and report factory production costs.

4 Class Hours; Prerequisite: BUS 100 Accounting I

BUS 102 Payroll Accounting (2)

A comprehensive study of federal and state laws and regulations affecting payrolls and payroll taxes, practical report preparation and reporting. Requirements including use of a computerized payroll system and proper accounting practices to record payroll and payroll taxes.

2 Class Hours; Prerequisite: BUS 100 or equivalent

BUS 107 The Freshman Experience (1)

An introduction to college life for the beginning student in the Business Department. College and Departmental policies and procedures, academic advisement and registration, study skills, the library, transfer and employment opportunities, topics in health and fitness.

1 Class Hour

BUS 108 Accounting for a Service Business (2)

Introduction to basic accounting procedures. Topics to include journals and ledgers, cash and credit transactions, internal control over cash and the voucher system. Emphasis on how the cash basis system works for a service based business. (May not be taken for degree credit by Business Division students. See BUS 100.)

2 Class Hours

BUS 110 Introduction to Business (3)

General background of modern business practices through the study of organization and management, production, human resources, accounting and finance, marketing, and the information needed for control and management decisions in business and society.

3 Class Hours

BUS 112 Quantitative Business Methods (3)

Quantitative analysis of contemporary business problems. Emphasis is on bank records, percentages, markups, cash and trade discounts, overhead distribution, simple interest and negotiable instruments, depreciation, inventory estimation and valuation, credit insurance, compound interest and annuities.

3 Class Hours; Prerequisite: MAT 090 Arithmetic and the Language of Algebra or passing grade on Math Placement Test

BUS 115 Business Statistics (3)

Concepts and mechanics of measures of central tendency, measures of dispersion, probability, sampling theory, estimation, hypothesis testing and correlation as they relate to general problems in business and economics.

3 Class Hours; Prerequisite: MAT 092 Introduction to the Concepts of Algebra or equivalent (course one high school math)

BUS 116 Business in a Global Environment (3)

An overview of the historical, social, cultural, political, economic, environmental, geographic and legal considerations of business and commerce in an international framework. Comparative analysis between the U.S. and the world through readings, discussions and case studies. Current trade patterns, economic theories encouraging trade, and global trade issues affecting elements of international practices of business will be introduced.

3 Class Hours

*BUS 117 Business and Society (3)

The role of business in the contemporary world. Increasingly difficult parameter for business despite the growing demands of accountability from government and of social responsibility from consumers. Business values and ethics, the role of business and government, environmental issues and energy policy, business and labor, business and consumer, the influence of multi-national corporations.

3 Class Hours

BUS 118 Business Law I (3)

Law as an evolutionary and democratic process. Court structure, administrative law, law-of-contracts, legal principles of agency, employment rights and an introduction to partnership.

3 Class Hours

BUS 120 Business Law II (3)

The law governing the negotiation or transfer of commercial paper, law of sales, law of personal and real property, bailments, insurance, landlord-tenant relationships and an introduction to corporate law.

3 Class Hours; Prerequisite: BUS 118 Business Law I

BUS 129 Consumer Behavior (3)

Emphasizes the development of how people make purchase decisions in the marketplace. Consumer decision making, learning, brand loyalty and market segmentation.

3 Class Hours

BUS 130 Retail Management (3)

Techniques involved in planning, organization, control and operation of diverse retail establishments. Trading area analysis, warehousing, inventory control, customer relations. Case studies, field trips.

3 Class Hours; Prerequisite: BUS 264 Retailing

BUS 131 Personal Finance (3)

Guidelines for financial planning regarding long-term and short-term installments buying, i.e., homes, autos, etc., credit, insurances, taxes, savings, budgeting, and investments in real estate, stocks, bonds, IRA's, mutual funds, money market accounts, etc.

3 Class Hours

*Bus 135 Investments (3)

Evaluation of retirement/pension choice (IRA, SEP/IRA, Keogh, 403b, 401k, etc.). Selection, analysis and valuation of Limited Partnerships, Investment Companies (Closed-End vs. Open End Mutual Funds), REIT's, Unit Investment Trusts, Fixed Income Securities, Government Securities, Common Stock, Options, Annuities and various insurance company hybrids. Non-financial assets, i.e., collectibles and precious metals as tools of investing.

BUS 141 Marketing (3)

Introductory study of Marketing as an art and a science. Analysis of the basic principles and practices necessary to complete the marketing cycle effectively. Marketing of goods and services, from conception of the original product idea to delivery to the ultimate consumer. Marketing mix, marketing concept, environmental and societal constraints. Lecture, discussion, cases.

3 Class Hours

BUS 152 Selling Fundamentals (3)

Principles of sales with practical application. Steps leading to a successful sale — prospecting, planning and delivering, dramatizing, handling objections, closing, building good will. Development and presentation of a complete procedure for a product or service. Closed-circuit television used to critique sales presentations.

*BUS 154 Purchasing (3)

An overview of the procurement and materials management activities that occur in an industrial environment. Discussion topics include supplier selection, pricing, negotiation, contracts, inventory, management and quality. Case studies are used to emphasize purchasing's role in the organization.

3 Class Hours

*BUS 159 Management Institute I (1)

From the "hands on" point of view, an overview of what it takes to be a manager. Self-evaluation, management functions, data management, legal regulations and unions, organizational overview, the people factor in management and role playing. A team-teaching approach is used when possible.

1 Class Hour

BUS 161 Real Estate Appraisal (3)

Designed to acquaint participants with the appraisal process of real property. Market approach, income approach and cost approach to value. Activities designed to build appraisal skills through case study, prepare appraisal reports and analyses.

3 Class Hours

*BUS 163 Real Estate for Salespersons (4)

Designed to meet New York state requirements for licensure as a real estate salesperson. Land use regulation, law of contracts, real estate instruments, real estate mathematics, real estate finance, closing and closing costs, brokerage and the law of agency, valuation and listing procedures, license law and ethics, human rights and fair housing.

4 Class Hours

*BUS 164 Real Estate for Brokers (4)

Designed to meet New York state requirements for licensure as a real estate broker. Land use regulation, operation of a real estate broker's office, general business law construction, subdivision and development, leases and agreements, liens and easements, taxes and assessments, investment property, property management, condominiums and cooperatives, appraisal, advertising, rent regulations.

4 Class Hours; Prerequisite: BUS 163 Real Estate for Salespersons

*BUS 170 Insurance for Agents and Brokers (7)

Comprehensive survey of insurance. Fire, marine, automobile, owner liability, burglary, boiler, machinery, accident and health, fidelity and surety insurance, insurance law and duties of the agent. Designed to meet requirements for the property and casualty insurance.

7 Class Hours

•All asterisked (*) courses are taught evenings only and when enrollment permits.

*BUS 176 Real Estate Finance (3)

Analysis of theories, practices and policies of real estate financing. Mortgage theory and lending practices in addition to alternative means of financing real property in the contemporary market. Case practices to build analytical skills in selecting different financing approaches.
3 Class Hours

*BUS 188 Income Tax I (2)

Fundamental federal and New York state income tax rules and regulations for filing personal income tax forms. Gross income inclusions and exclusions, adjustments to income, tax credits, estimated taxes, itemized deductions, penalties and avoidance, amended tax returns.
2 Class Hours

*BUS 189 Income Tax II (2)

Preparation of supplementary tax form, such as capital gains, rentals, income averaging, sole proprietorship, self-employment taxes, investment credit, corporation tax returns, sub-chapter S corporations, gift and inheritance taxes.
2 Class Hours

BUS 200 Intermediate Accounting I (4)

An intensive study of accounting theory and procedures. Emphasis on balance sheet accounts and their interrelationships with income statement accounts. The accounting process and correction of errors. Advanced treatment of cash, receivables, inventories.
4 Class Hours; Prerequisite: BUS 101 Accounting II

BUS 201 Intermediate Accounting II (4)

A more advanced treatment of accounting for fixed assets, intangible assets, current and long-term liabilities. Corporation accounting, funds flow reporting, financial statement analysis.
4 Class Hours; Prerequisite: BUS 200 Intermediate Accounting I

BUS 205 Cost Accounting I (4)

Nature and purpose of cost accounting. Job order and process costing. Accounting for factory overhead and analysis of variances. Accounting for labor and material.
4 Class Hours; Prerequisite: BUS 101 Accounting II

BUS 206 Cost Accounting II (4)

Further consideration of cost accounting principles, standard costs and variances. The construction of budgets, profit planning. Flexible budgets. Direct costing. Break-even analysis. Accounting for by-products and joint products. Non-manufacturing costs.
4 Class Hours; Prerequisite: BUS 205 Cost Accounting I

BUS 209 Operations Management (3)

A study of the overall production-related activities of a manufacturing firm. Topics include: project planning, capacity planning, scheduling, inventory management, MRP, JIT, CIM and TQM.
3 Class Hours

BUS 210 Managerial Accounting (4)

Accounting for managerial analysis and decision making, providing an analysis of accounting data useful in the planning and control functions of a firm. Study of cost concepts, break-even, differential accounting and responsibility accounting.
4 Class Hours; Prerequisite: BUS 101 Accounting II

BUS 224 Business Finance (3)

Financial principles and procedures of capital management. Analysis of the relationship of finance to micro and macro economics factors such as inflation business cycle, competition, regulation. Emphasis on corporate goals and objectives as a determining factor in the choice of financial management policy. Application of financial ratios, cash budgeting, forecasting, leverage, working capital policy, capital markets, stocks and bonds, valuation and other basic areas of finance.
3 Class Hours; Prerequisite: BUS 100 Accounting I

BUS 229 Advertising (4)

Development, economics, functions of advertising. Cost application, media, testing and research methods. Development of advertisements, copy and layout, methods and problems of reproduction. Planning the advertising campaigns with step-by-step developments. Lectures, discussions, demonstrations. BUS 141 Marketing is recommended as preparation for this course.
4 Class Hours

BUS 238 Marketing Research (3)

Methods of collecting and interpreting marketing information which affects marketing management. Specific applications to problem identification in market development, gauging market potential and implementation of research designs in the marketplace.
3 Class Hours

BUS 242 Marketing Seminar (3)

Senior capstone course which integrates various business subjects previously studied. Individual and team approach to analysis of comprehensive marketing and management cases and cooperative consideration of alternative decisions to problem solving.
3 Class Hours; Prerequisite: Non-marketing majors must have adviser's permission

BUS 245 Management: A Behavioral Approach (3)

A comprehensive analysis of managerial theories and an integration of selected social sciences to investigate organizational problems related to managerial functions. Impact of the organizational environment and work groups upon human behavior.
3 Class Hours

BUS 246 Principles of Management (3)

Principles of managerial practices. Planning, organizing, directing and controlling. Exposes students to proper methods and techniques to achieve employee and job satisfaction. Topics covered include scientific management, behavioral theory and introduction to management science.

BUS 249 Personnel Management (3)

Principles of managerial practices. The four functions of management: planning, organizing, directing and controlling. Designed to expose the student to the proper methods and techniques to achieve employee and job satisfaction. Processing, developing, maintaining proper utilization of the labor force. A review of the history and impact of organized labor incorporating economic, political and social pressures which influence employment. Effective interview poise, personal appearance, interviewing techniques, job opportunities and placement services. Correct preparation of a resume and the utilization of references.
3 Class Hours

*BUS 252 Supervision of Personnel (2)

Concepts and psychology of personnel supervision. Emphasis on the application of management theory through use of case studies and classroom discussions.
2 Class Hours

*BUS 254 Management Institute II (3)

From the "hands on" point of view, an in-depth study of what it takes to be a manager. Coaching, counseling, performance, appraisal, interviewing, conflict resolution, risk, communications, data management and dealing with stress. A team-teaching approach is used when possible.
3 Class Hours

*BUS 255 Industrial Labor Relations (2)

Processes of bargaining and contract administration between industrial employers and union representing employees, as a system of compromising opposing objectives and settling differences. Origins of unions, how they organize and gain recognition and how the labor agreement is negotiated and administered. Interaction among employees, stewards and supervisors. Labor laws. Institutions such as the National Labor Relations Board, mediation, services, arbitration boards and courts.
2 Class Hours

*BUS 258 Human Relations in Business (2)

Basic psychological principles applied to the problems of employee selection, training, evaluation, merit rating and advancement. Social interaction and human relations in industry. Motivation concepts and techniques, job satisfaction, morale, conference leadership and employee and management development.
2 Class Hours

BUS 259 Business Report Writing (3)

Training in logical analysis of business case problems, applied to the preparation of accurate written reports. Methods and skills in formal and informal business writing. Preparation of tables, charts, reference citations and bibliographies. Improvement of basic business writing skill involved in interoffice memos, letters of adjustment, bids, quotations, public relations.
3 Class Hours

BUS 262 Small Business Management (3)

An overview designed for those interested in small business as owner-managers. Development of modern management techniques covering forms of organization, site acquisition and location, insurance, marketing, financing, pricing, break-even, permits, license and franchising.
3 Class Hours

BUS 263 Small Business Seminar (4)

An intensive study of the various facets involved in organizing and operating a small business venture. Researching and evaluating business opportunities, establishing a buying/selling price for the business, small business taxation, analyzing and solving business problems, using information to manage marketing ideas. Heavy emphasis on development of the business plan and preparation of the loan proposal.
4 Class Hours; Prerequisite: BUS 101 Accounting II

•All asterisked (*) courses are taught evenings only and when enrollment permits.

BUS 264 Retailing (3)

The history and overview of Retailing as well as the types of retail establishments. The four major areas of retailing: Merchandising, Finance, Operations and Sales Promotion will be covered in depth. Types of retail outlets, including specialty, department stores, chain stores, supermarkets and discount stores, etc., will be considered.
3 Class Hours

BUS 265 Retail Merchandising (3)

Principles of effective display: interior, window, point-of-purchase. Analysis of consumer buying habits, market evaluation, trend forecasting. Evaluation of variables of decor, lighting, impulse arrangements. Techniques of advertising and sales promotion. Case studies, field trips.
3 Class Hours; Prerequisite: BUS 264 Retailing

BUS 266 Advertising and Promotion for Small Business (4)

A comprehensive study emphasizing "hands on" approach to small business advertising and promotion. Functions of advertising and promotion, budgeting, media selection, cost consideration, development of copy and layout. Students will use various media, including television, in the preparation of an advertising campaign. Current information on public relations and merchandising. Store layout and design, sales promotion, dealer programs and co-op advertising.
4 Class Hours

BUS 270 Management Science (3)

An introduction to managerial problems relating to the planning and controlling functions, which provide guidelines to making rational decisions. A realistic approach utilizing cases and simulation is taken to expose the student to quantitative as well as subjective analysis to point out the constraints placed upon management.
3 Class Hours; Prerequisite: BUS 115 Business Statistics or MAT 124 Statistics I

BUS 295 Accounting Seminar (4)

In-depth treatment of accounting for payroll taxes followed by actual completion of required state and federal tax forms. Thorough coverage of the Individual Tax Form 1040, schedules A, B, C, D, E and G, small business taxes schedule SE and investment credit. Corporate tax form 1120. Accounting concepts and current trends in accounting as reflected through financial statement analysis.
4 Class Hours

BUS 297 Cooperative Work Experience (1-3)

Cooperative education is available to students in the marketing management, marketing sales and accounting curricula. On-the-job experience may be obtained in such areas as retailing, banking, fast foods, government services and hotel management, as well as CPA firms, public accounting offices, industrial, business and government offices where accounting is performed. Cooperative work students will meet with the coordinator one hour each week.
Prerequisite: Full-time student (minimum of 12 credit hours) maintaining an overall grade-point average of 2.5, with 3.00 in Business courses and no F's

BUS 299 Independent Study (1-4)

The student, under the guidance of a faculty member, undertakes an investigation, study and research in an advanced concept or problem concerning his/her major field of study. Only one independent study course is allowed per semester.
Prerequisite: Approval of faculty member and department chairperson

CAD 150 Basic CADAM (2)

Introduction to the operation of CADAM System. Data base hierarchy. Construction of basic drawing elements. Display management. Manipulation of drawing elements. Creation of simple mechanical layouts and detail drawings in two dimensions. Methods for efficient use of the CADAM System. Selected topics.
1 Class Hour, 2 Laboratory Hours; Prerequisite: Cartesian/Polar Coordinate Systems and background in engineering drawing

CAD 151 Advanced CADAM (2)

Construction of advanced and specialized drawing projects, including mechanical layout and detail drawings. Use of all menu options for creating, modifying and manipulating elements. SPLINE function. Advanced use of NOTE, DIMENSION, Aux view and SYMBOL functions. Introduction to sets and attributes and the OVERLAY function. Selected topics.
1 Class Hour, 2 Laboratory Hours; Prerequisite: CAD 150 Basic CADAM

CAD 205/CIV 205 Introduction to Computer Graphics with Architectural Applications (3)

Introduction to the operation of the College's Architectural CAD system — ARRIS. Construction, manipulation and editing of basic drawing elements. Architectural applications using the Building Design and Drafting package and the Architectural Drafting and Documentation package — floor plans, sections, elevations, details. Use of symbol libraries; "smart walls"; automatic generation of materials list, cost estimates, window and door schedules, elevation views. Introduction to 3D modeling and rendering.
2 Class Hours, 3 Laboratory Hours; Prerequisite: Cartesian/Polar Coordinate Systems and an acceptable background in engineering or architectural drawing

CAD 211 Basic Mechanical Design (2)

Introduction to the College's Mechanical CAD System. Command structure, screen controls and use of menus. Use of commands to draw and manipulate two-dimensional models. Command history files. Introduction to three-dimensional work. Selected topics.
1 Class Hour, 2 Laboratory Hours; Prerequisites: Cartesian/Polar Coordinate Systems and background in engineering drawing

CAD 212 Detailing (2)

Use of the College's Mechanical CAD System to produce engineering production drawings from a three-dimensional model. Enhance the appearance of model geometry to meet drafting conventions. Text, Dimensions and Tolerancing to industry standards. Create drawing formats. Selected topics.
1 Class Hour, 2 Laboratory Hours; Prerequisite: CAD 211 Basic Mechanical Design

CAD 213 Intermediate Mechanical Design (2)

Use of the College's Mechanical CAD System to create and manipulate three-dimensional models. Multiple views of models including standard views and user-defined views. Application to assemblies. Definition and intersection of basic surfaces. Selected topics.
1 Class Hour, 2 Laboratory Hours; Prerequisite: CAD 211 Basic Mechanical Design

CAD 214 Advanced Mechanical Design (2)

Use of the College's Mechanical CAD System in advanced applications. Mass properties of individual and composite volumes. Advanced surface work — commands and design approach. Applications to Descriptive Geometry — intersections, developments, B-splines. Selected topics.
1 Class Hour, 2 Laboratory Hours; Prerequisite: CAD 213 Intermediate Mechanical Design and knowledge of Descriptive Geometry

CAD 230 CAD System Operation (3)

System architecture — physical components. Hands-on experience. Building a system, day-to-day operating procedures, system failures and recovering procedures. Disc file management, magnetic tape backups, data security and network management.
2 Class Hours, 4 Laboratory Hours; Prerequisite: One previous credit course from the Computer Graphics Department or equivalent industrial experience.

CAD 252 Drafting on a Solids Modeling System (2)

Introduction to the operation of the college's Solids Modeling System. Data Base Hierarchy. Construction and manipulation of basic drawing elements. Display management. Creation of simple mechanical layouts in two dimensions, including orthographic views and dimensioning annotation. Introduction to layers. Methods of efficient use of the CAD System.
1 Class Hour, 2 Laboratory Hours; Prerequisite: Cartesian/Polar Coordinate Systems and background in engineering drawing

CAD 253 Basic Solids Modeling (2)

Construction of 3D wireframe models. Construction of 3D solid models from wireframes. Construction of faceted solid models using Boolean operations on basic solid primitives. Manipulation of 3D space elements and models. Introduction to libraries and details.
1 Class Hour, 2 Laboratory Hours; Prerequisite: One of the following: CAD 150 Basic CADAM, CAD 211 Basic Mechanical Design, CAD 252 Drafting on a Solids Modeling system, or permission of Computer Graphics Chairperson

CAD 254 Advanced Applications of a Solids Modeling System (3)

Definition of complex geometric shapes with advanced curves and surfaces using the wireframe. Advanced CAE applications.
1 Class Hour, 2 Laboratory Hours; Prerequisite: CAD 253 Basic Solids Modeling

CAD 299 Independent Study (1-4)

The student undertakes an independent project in his/her specialty under the guidance of a faculty member which is beyond the scope of courses currently offered by the department. Only one independent study course allowed per semester. Consideration may be given to a project involving a work assignment.
Prerequisite: Permission of Computer Graphics Chairperson

CHM 102 Preparatory Chemistry (4)

Introductory course in chemistry emphasizing problem-solving techniques related to chemical concepts. Atomic structure, stoichiometry, metric units, chemical bonding, chemical nomenclature, solution chemistry.
4 Class Hours; Prerequisite: MAT 099 Elementary Algebra

CHM 120 Fundamental Chemistry (4)

First course for Fire Protection Technology, Health Sciences and Criminal Justice students. Composition of substances, atomic structure, periodicity, bonding, chemical equations, state of matter, aqueous solutions, chemical equilibria and introduction to organic chemistry.
3 Class Hours, 3 Laboratory Hours; Prerequisite: MAT 090 Arithmetic and the Language of Algebra

CHM 121 Forensic Sciences (4)

Introduction to forensic science for Criminal Justice students. The science behind the examination of firearms, cartridges, explosives, drugs and other types of physical evidence by the crime lab is presented. Emphasis on proper handling of substances found in crime scene investigations. Laboratory techniques include many modern instrumental methods, such as gas chromatography, infrared and mass spectroscopy as used in today's modern crime labs.
3 Class Hours, 3 Laboratory Hours

*CHM 125 Chemistry (3)

Fundamental concepts of inorganic chemistry. Composition of substances, kinetic and molecular theories, atomic structure and bonding, solutions and colloids, ions in solution and introduction to organic chemistry. For Fire Protection Technology students.
2 Class Hours, 3 Laboratory Hours

CHM 133 Survey of Organic Chemistry (3)

Fundamental treatment of organic chemistry, nomenclature, properties of selected functional groups, mechanisms, stereochemistry and synthetic methods. Special emphasis on biomolecules such as lipids, carbohydrates, nucleic acids, vitamins and medicinally active compounds.
3 Class Hours; Prerequisite: CHM 145 Chemistry I and CHM 145 Chemistry Laboratory I; Corequisite: CHM 146 Chemistry II and CHM 146 Chemistry Laboratory II and CHM 133L Survey of Organic Chemistry Laboratory

CHM 133L Survey of Organic Chemistry Laboratory (1)

Emphasis on techniques on separation, identification and purification by classical and instrumental methods such as gas chromatography and spectroscopy, and selected experiments with biomolecules.
4 Laboratory Hours; Prerequisite: CHM 145 Chemistry Laboratory; Corequisite: CHM 133 Survey of Organic Chemistry

CHM 141 General Organic and Biochemistry I (3)

Introductory treatment of general chemistry for the non-science student emphasizing applications of chemistry in everyday life. Measurements, atoms and bonding, the states of matter, nuclear processes, oxidation and reduction solutions, acids and bases. Applications include energy sources, effects of radiation, the environment, life processes, testing of advertising claims. For Liberal Arts non-science students.
3 Class Hours; Corequisite: CHM 141L General Chemistry Laboratory I

CHM 141L General Chemistry Laboratory I (1)

Experiments to introduce chemical laboratory techniques while increasing awareness of the chemical world and to attain some insight into how a chemist attacks a problem. Qualitative and quantitative measurements.
3 Laboratory Hours; Corequisite: CHM 141 General Organic and Biochemistry I

CHM 142 General, Organic and Biochemistry II (3)

Continuation of CHM 141 General Chemistry. Basic concepts of organic and biochemistry. Petroleum, halogenated hydrocarbons, plastics, drugs, consumer products, living systems, food and metabolism. For Liberal Arts non-science students.
3 class Hours; Prerequisite: CHM 141 General Organic and Biochemistry I; Corequisite: CHM 142L General Chemistry Laboratory II

CHM 142L General Chemistry Laboratory II (1)

A continuation of CHM 141L General Chemistry Laboratory emphasizing organic and biochemical experiments which substantiate classroom lectures.
3 Laboratory Hours; Corequisite: CHM 142 General Organic and Biochemistry II

CHM 145 Chemistry (3)

Comprehensive treatment of general chemistry for the science-oriented student. Builds on their prior chemistry, with emphasis on the basic laws and theories of chemistry and their derivation from experimental evidence. Presents the qualitative and quantitative aspects of matter's composition and changes and their unifying principles. Includes physical and chemical properties, periodicity of elements, stoichiometry, current atomic and bonding theories, laws and theories of physical states and changes of state, solution chemistry, and thermochemistry.
3 Class Hours; Prerequisite: Regents Chemistry (75 minimum final grade) or CHM 102 Preparatory Chemistry and Regents Level III Math or MAT 139; Corequisite: CHM 145L Chemistry Laboratory

CHM 145L Chemistry Laboratory (1)

Laboratory experiments to emphasize the empirical basis for the principles discussed in lecture and the proper gathering and interpretation of experimental data.
3 Laboratory Hours; Corequisite: CHM 145 Chemistry

CHM 146 Chemistry (3)

Continuation of CHM 145 Chemistry including thermodynamics, kinetics, equilibrium, equilibrium in aqueous solution, acids and bases, coordination chemistry and electrochemistry.
3 Class Hours; Prerequisite: CHM 145 Chemistry, CHM 145L Chemistry Laboratory; Corequisite: CHM 146 Chemistry Laboratory

CHM 146L Chemistry Laboratory (1)

Continuation of CHM 145 Laboratory with experiments designed to illustrate thermodynamics, kinetics, equilibrium, qualitative analysis, and electrochemistry.
3 Laboratory Hours; Corequisite CHM 146 Chemistry

CHM 161 Chemistry (3)

Basic concepts underlying chemical action emphasizing measurement, basic chemical calculations, atomic structure and periodic law. Chemical bonding, states of matter, solutions, kinetic/molecular theories, chemical equilibrium and energy changes in chemical reactions.
3 Class Hours; Prerequisite: Regents Chemistry or CHM 102 Preparatory Chemistry; Corequisite: CHM 161L Chemistry Laboratory

CHM 161L Chemistry Laboratory (1)

Experiments illustrating concepts from lecture. Emphasis on keeping a laboratory notebook and on laboratory skills required for the chemical laboratory. Exercises mostly quantitative in nature.
3 Laboratory Hours, 1 Recitation Hour; Corequisite: CHM 161 Chemistry

CHM 162 Chemistry (3)

A continuation of CHM 161 Chemistry. Oxidation-reduction and electrochemistry, acids, bases and salts. Solubility product principle, acid/base equilibrium, thermodynamics. Principles of qualitative analysis.
3 Class Hours; Prerequisite: CHM 161 Chemistry and CHM 161L Chemistry Laboratory; Corequisite: CHM 162L Chemistry

CHM 162L Chemistry Laboratory (1)

Experiments illustrating concepts from lecture, including seven weeks of semimicro qualitative analysis. Emphasis on laboratory skills and notebook keeping
3 Laboratory Hours, 1 Recitation Hour; Prerequisite: CHM 161 Chemistry and CHM 161L Chemistry Laboratory; Corequisite: CHM 162 Chemistry

CHM 220 Introduction to Instrumental Analysis (2)

An introduction to the theory and laboratory instruction in electrochemical, nuclear, optical and chromatographic methods of analytical chemistry. Laboratory techniques include potentiometry, conductimetry, coulometry, polarography, liquid scintillation counting, gamma spectrometry, ultraviolet-visible, infrared, atomic absorption spectrophotometry, gas, ion, high performance liquid chromatography, and gas chromatography, mass spectrometry. For Medical Laboratory Technology students.
1 Class Hour, 3 Laboratory Hours; Prerequisite: CHM 146 Chemistry

CHM 245 Organic Chemistry (3)

A fundamental treatment of organic chemistry. Organic nomenclature, chemical properties of selected functional groups, mechanisms, stereochemistry and synthetic methods. For Liberal Arts science majors and Engineering Science students with departmental approval.
3 Class Hours; Prerequisite: CHM 146 Chemistry; Corequisite: CHM 245L Organic Chemistry Laboratory

CHM 245L Organic Chemistry Laboratory (2)

Basic techniques of separation and purification such as recrystallization, distillation, extraction, chromatography, modern instrumental techniques. Introduction to modern organic synthesis with emphasis on microscale techniques and methods of separation and purification.
4 Laboratory Hours; Corequisite: CHM 245 Organic Chemistry

CHM 246 Organic Chemistry (3)

A continuation of CHM 245 Organic Chemistry including spectroscopy and introduction to molecules of biological importance.
3 Class Hours; Prerequisite: CHM 245 Organic Chemistry; Corequisite: CHM 246L Organic Chemistry

CHM 246L Organic Chemistry Laboratory (2)

A continuation of CHM 245L Organic Chemistry Laboratory including an introduction to complex multistep synthesis and qualitative organic analysis by classical and modern instrumental techniques with emphasis on microscale techniques.
4 Laboratory Hours; Prerequisites: CHM 245 Organic Chemistry and CHM 245L Organic Chemistry Laboratory; Corequisite: CHM 246 Organic Chemistry

CHM 251 Chemical Engineering Technology Seminar (1/2)

Topics in the field of Chemical Engineering Technology will be presented by guest lecturers from industry and academics. For Chemical Engineering Technology students.
1 Class Hour

CHM 261 Organic Chemistry (3)

A systematic study of the families of organic chemistry, including concepts of bonding, equilibria, reaction, kinetics, energy profiles, isomerism and synthesis. Families viewed with emphasis on nomenclature, structural features, preparations, reaction products and uses.
3 Class Hours; Prerequisite: CHM 162 Chemistry; Corequisite: CHM 261L Organic Chemistry Laboratory

•All asterisked (*) courses are taught evenings only and when enrollment permits.

CHM 261L Organic Chemistry Laboratory (2)

Experiments include separation techniques using instrumentation (infrared spectroscopy, gas chromatography) and synthesis.
6 Laboratory Hours; Corequisite: CHM 261 Organic Chemistry

CHM 262 Organic Chemistry (3)

Continuation of CHM 261 Organic Chemistry. Mass spectroscopy and nuclear magnetic resonance. Special topics including heterocyclic compounds, polymers, biomolecules.
3 Class Hours; Prerequisite: CHM 261 Organic Chemistry; Corequisite: CHM 262L Organic Chemistry Laboratory

CHM 262L Organic Chemistry Laboratory (2)

Emphasis on qualitative organic chemistry. Identification of unknowns.
6 Laboratory Hours; Prerequisite: CHM 251L Organic Chemistry Laboratory; Corequisite: CHM 262 Organic Chemistry

CHM 265 Instrumental Methods of Chemical Analysis (3)

Principles and techniques of modern quantitative analysis including treatment of analytical data, sampling, solution adjustment, chelatometry, redoximetry, aqueous and non-aqueous acid-base titrations, electrophoresis and isoelectric focusing, ion-exchange, ion chromatography, conductimetry, coulometry, electrogravimetry, polarography, amperometry, potentiometry, radioisotope methodology. For Chemical Engineering Technology and Liberal Arts "chemical model" students.
3 Class Hours; Prerequisites: 1 full year of college general chemistry, MAT 162 Applied Calculus, PHY 142 Physics and CST 140 Computer for Chemists or equivalent; Corequisite: CHM 265L Instrumental Methods of Chemical Analysis Laboratory

CHM 265L Instrumental Methods of Chemical Analysis Laboratory (2)

Application of chelometric, redoc, precipitimetric, aqueous and non-aqueous acid-base methods for chemical analysis or organic and inorganic compounds. Operation of polarographs, conductimeters, potentiometers, coulometers, and electroanalyzers for applications in electrochemical methods of analysis. Operation of a microprocessor controlled liquid scintillation counter, gamma spectrometer, and Geiger-Muller counter for applications in radioisotope methodology. Statistical evaluation of data obtained by the various analytical methods. For Chemical Engineering Technology and Liberal Arts "chemical model" students.
6 Laboratory Hours; Prerequisites: 1 full year of general chemistry, MAT 162 Applied Calculus I. PHY 142 Physics and CST 140 Computer for Chemists or equivalent; Corequisite: CHM 265 Instrumental Methods of Chemical Analysis

CHM 266 Instrumental Methods of Chemical Analysis (3)

Principles and techniques of modern instrumental methods of chemical analysis, including ultraviolet visible, infrared, nuclear magnetic resonance, atomic absorption, emission and mass spectroscope. Ion, gas and liquid chromatography. Chemical and scanning electron microscopy and differential thermal analysis. For Chemical Engineering Technology students.
3 Class Hours; Prerequisite: CHM 265 Instrumental Methods of Chemical Analysis; Corequisite: CHM 266L Instrumental Methods of Chemical Analysis Laboratory

CHM 266L Instrumental Methods of Chemical Analysis Laboratory (2)

Analysis by optical, chromatographic, thermal techniques, and trace methods applied to contemporary, industrial and environmental problems.
6 Laboratory Hours; Prerequisite: CHM 265 Instrumental Methods of Chemical Analysis; Corequisite: CHM 266 Instrumental Methods of Chemical Analysis

CHM 271 Chemical Processes (3)

Material and energy balances along with applied and physical principles as they apply to chemical engineering. Emphasis on chemical problem solving.
3 Class Hours; Prerequisites: CHM 162 Chemistry, MAT 162 Applied Calculus I, PHY 142 Physics and CST 140 Computers for Chemists or equivalent; Corequisite: CHM 271L Chemical Processes Laboratory

CHM 271L Chemical Processes Laboratory (2)

Application of lecture topics to industrial situations. Emphasis on written and oral reports.
4 Laboratory Hours; Corequisite: CHM 271 Chemical processes

CHM 272 Chemical Processes (3)

Staged operations dealing with phase equilibrium. Graphical, analytical and computer methods are used to solve unit operations problems.
3 Class Hours; Prerequisite: CHM 271 Chemical Processes; Corequisite: CHM 272L Chemical Processes

CHM 272L Chemical Processes Laboratory (2)

Measurement of phase equilibrium. Graphical, analytical and computer methods are used to solve unit operations problems.
4 Laboratory Hours; Corequisite: CHM 272 Chemical Processes

CHM 290 Forensic Toxicology (3)

Application of the principles of forensic toxicology and the related forensic sciences within the scope of medical-legal investigation. Drug and poison analysis, examination of physical evidence and death investigation. Laboratory sessions will provide basic knowledge of forensic analysis utilizing microscopy, gas chromatography, thin layer chromatography and spectroscopy.
2 Class Hours, 2 Laboratory Hours; Prerequisite: CHM 120 Fundamental Chemistry or a semester of General Chemistry or permission of instructor

*CHM 291 Organic Chemistry I (3)
*CHM 292 Organic Chemistry II (3)

Nomenclature, properties of selected functional groups, mechanisms, stereochemistry, synthetic methods and spectroscopy. The laboratory stresses basic techniques of reactions, separations and isolations by classical methods as well as modern instrumental techniques.
2 Class Hours, 3 Laboratory Hours each; Prerequisites: CHM 146 Chemistry for CHM 291, CHM 292 Organic Chemistry* for CHM 292

*CHM 293 Analytical-Instrumental Chemistry I (3)

Classical analytical chemistry — sampling, statistics, gravimetric and volumetric analysis. Introduction to electrochemistry.
2 Class Hours, 3 Laboratory Hours; Prerequisite: CHM 146 Chemistry

*CHM 294 Analytical-Instrumental Chemistry II (3)

Continuation of CHM 293 Analytical-Instrumental Chemistry I. Additional electrochemistry and electrochemical techniques. Emphasis on spectroscopic and chromatographic methods. Visible, infrared and nuclear magnetic resonance spectroscopy. Gas, liquid, column and thin layer chromatography.
2 Class Hours, 3 Laboratory Hours; Prerequisite: CHM 293 Analytical-Instrumental Chemistry I

CHM 299 Independent Study (1-4)

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving a work assignment.
Prerequisite: Departmental approval

CIV 110 Introduction to Civil Engineering Technology (1/2)

Introduction to the College and its policies and procedures including the library, placement, academic advisement and study skills. Reasonable skill in the hand-held calculator to be developed. Program course advisement including mathematics sequences. Outside speakers representing the various sectors of employment.

CIV 111 Surveying I (4)

Fundamentals of plane surveying. Angle and distance measurement, leveling, stadia, note keeping, operation and care of instruments, traversing and topographic surveys. Use of the level, transit, theodolite and Electronic Distance-Measuring (EDM) instruments. Extensive laboratory application of theory.
2 Class Hours, 6 Laboratory Hours; Prerequisite: MAT 140 or equivalent

CIV 112 Surveying II (2)

A continuation of CIV 111 Surveying I. Topographic surveying and mapping, boundary surveys, field astronomy, control surveys, satellite surveying systems, construction surveys, state plane coordinates, use of total station and data collector, computer applications.

CIV 115 Engineering Drawing (2)

Fundamentals of Engineering Drawing includes care and use of instruments, linework, lettering, geometric constructions, orthographic projection, sections, auxiliary views, pictorial drawings, and dimensioning. Fundamentals of Descriptive Geometry including visibility, true length, true shape, parallelism, perpendicularity, intersections, and developments.
1 Class Hour, 3 Laboratory Hours

CIV 119 Architectural Drafting (2)

Fundamentals of architectural drafting including floor plans, elevations, sections, details, schedules, plot plans, plumbing layouts, electrical layouts. Emphasis on residential drawings.
4 Laboratory Hours; Prerequisite: CIV 115 Engineering Drawing

CIV 124 Mechanics (Statics) (3)

Static force systems and equilibrium. Free body diagrams, trusses, graphic statics, spatial force systems, friction, centroids, moments of inertia.
3 Class Hours; Prerequisite: PHY 141 Physics

*CIV 155 Surveying (3)

Plane surveying including distance measurement, note keeping, compass surveying, leveling, angle measurement, care and use of instruments, stadia, traversing, coordinates, area computation, mapping and records.
2 Class Hours, 3 Laboratory Hours; Prerequisite: MAT 139 Algebra and MAT 140 Trigonometry or equivalent

•All asterisked (*) courses are taught evenings only and when enrollment permits.

*CIV 156 Route Surveying (4)

Horizontal and vertical curves, spirals, sight distances and earthwork. Introduction to computer applications. Laboratory includes problem sessions using the college's computer to solve coordinate geometry problems.

3 Class Hours, 2 Laboratory Hours; Prerequisite: CIV 155 Surveying

*CIV 159 Architectural Drafting I (3)

Development of working drawing for use in residential type construction. Plot plans, floor plan, elevations, details, schedules, electrical layouts. Lectures to include construction materials, specifications and methods.

2 Class Hours, 3 Laboratory Hours

*CIV 160 Architectural Drafting II (3)

A continuation of CIV 159 Architectural Drafting I. Development of working drawings from two-story and split-level residences.

2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 159 Architectural Drafting I

*CIV 161 Architectural Drafting III (3)

Development of a set of working drawings for a small two-story commercial building including floor plans, elevations, sections, details, mechanical and electrical layouts, window and door schedules. Term project.

2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 160 Architectural Drafting II

CIV 205 Introduction to Computer Graphics with Architectural Applications (3)

Introduction to the operation of the College's Architectural CAD system — ARRIS. Construction, manipulation, and editing of basic drawing elements. Architectural applications using the Building Design and Drafting package and the Architectural Drafting and Documentation package - floor plans, sections, elevations, details. Use of symbol libraries; "smart walls"; automatic generation of materials lists, cost estimates, window and door schedules, elevation views. Introduction to 3D modeling and rendering.

2 Class Hours, 3 Laboratory Hours; Prerequisite: Cartesian/Polar Coordinate Systems and an acceptable background in engineering or architectural drawing

CIV 215 Strength of Materials (4)

Concepts of stress and strain. Behavior of materials due to axial force, shear, torsion and moment. Stresses in beams and columns, shear and moment diagrams, deflections, determinate and indeterminate members, composite members, combined stresses.

4 Class Hours; Prerequisite; CIV 124 Mechanics (Statics)

CIV 216 Route Surveying (3)

Simple and compound curves, vertical curves, spirals and earthwork. Selected topics in route design, and curve problems in highway design. Computer applications (COGO).

2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 111 Surveying I

CIV 217W Materials Testing (3)

Composition, properties and testing of construction materials. Major emphasis on plain concrete. Aggregates, cements, admixtures, design and proportioning of concrete mixes, curing and inspection. Bituminous materials, ferrous metals and structural timber – load and deformation measurements, behavior of materials under load, strain gauges. Writing Emphasis Course.

2 Class Hours, 3 Laboratory Hours; Corequisite: CIV 219 Strength of Materials

CIV 219 Strength of Materials (4)

Concept of stress and strain. Behavior of materials due to axial force, shear, torsion and moment. Stresses in beams and columns, shear and moment diagrams, deflections, determinate and indeterminate members, composite members, combined stresses. Stresses for structural timber, bolted timber joints, timber connectors and combined stresses.

4 Class Hours; Prerequisite: CIV 124 Mechanics (Statics)

CIV 224 Reinforced Concrete Design (3)

Fundamental theory and principles for design of reinforced concrete by the strength method. Design, analysis and detailing of rectangular beams, T-beams, beams reinforced for compression, columns and footings. Theory of prestressed concrete. An integrated design and detailing project.

2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 219 Strength of Materials

CIV 226 Structural Steel Design (3)

Fundamental theory and principles for design of simple steel structures. Design, investigation and detailing of beams, columns, tension and compression members and their connections. Composite beams. An integrated design and detailing project.

2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 219 Strength of Materials

*CIV 228 Estimating and Construction Planning (3)

A systematic approach to estimating building project costs combined with a study of construction scheduling techniques. Use of spreadsheet as an estimating tool. Term project in estimating.

2 Class Hours, 2 Laboratory Hours

CIV 231 Estimating and Construction Planning (3)

A systematic approach to estimate building project costs. Term project building cost estimate. Use of spreadsheet as an estimating tool.

2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 119 Architectural Drafting

CIV 236 Construction Management (3)

Principles of construction management, specification writing, with emphasis on planning, building, scheduling and controlling a project. Use of critical path program.

3 Class Hours

CIV 237 Hydraulics (3)

Hydraulics including properties of fluids, hydrostatics, fluid motion in or through orifices, nozzles, pipes, wires, open channels, pipe branches and networks.

2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 124 Mechanics (Statics)

CIV 238 Architectural Design and Building Materials (3)

Design and detailing of commercial building including site considerations, space requirements, layout planning, building materials, construction methods, construction details, working drawings. Emphasis on individual creativity. Semester project. Technical oral presentation.

2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 119 Architectural Drafting

CIV 240 Soil Mechanics (3)

Soil origin and nature, soil density, test borings, gradation, compaction, soil water, frost in soil, classification, permeability, shear strength, stress distribution, bearing capacity, piles. The laboratory covers ASTM and AASHTO specifications used in classifying and predicting behavior of soils.

2 Class Hours, 3 Laboratory Hours; Prerequisite: CIV 219 Strength of Materials

*CIV 255 Reinforced Concrete Design (3)

Fundamental behavior of reinforced concrete. Design and analysis of rectangular beams, T-beams, beams reinforced for compression, columns and footings. Major emphasis on ultimate strength design methods.

3 Class Hours; Prerequisite: MET 235 or CIV 219 Strength of Materials

*CIV 257 Structural Steel Design (3)

Fundamental theory and principles necessary for design of simple steel structures. Design and analysis of beams, columns, tension members, compression members and their connections. Composite beams, framing systems, loads and forces.

3 Class Hours; Prerequisite: MET 235 or CIV 219 Strength of Materials

*CIV 266 Hydraulics (3)

A basic course in theory and practical applications of hydraulics. Properties of fluids, measurements, hydrostatics, dynamic problems of both pipe and open channel flow. Application and limitations of some of the design aids in common use.

3 Class Hours; Prerequisite: MET 132 Applied Mechanics or equivalent

*CIV 268 Engineering Economics (2)

Use of compound interest in financing and in determining engineering cost comparisons. Introduction of depreciation methods. Illustrative cases and problems (personal and engineering) including New York State Professional Engineering Examination problems.

2 Class Hours; Prerequisite: MAT 139 Algebra or equivalent

CIV 299 Independent Study (1-4)

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent course allowed per semester. Consideration may be given to a project involving a work assignment.

Prerequisite: Departmental approval

COM 100 Introduction to Mass Media (3)

Overview of the components of American mass media, including history, structure, economics, regulation, verbal and visual imagery, and dynamics. Radio, television, newspapers, magazines, film, and the closely related advertising and public relations field are surveyed.

3 Class Hours

COM 115 Writing for the Media (3)

An introductory study of the elements necessary for media writing. Students will be exposed to writing formats commonly used in media production. Writing formats covered may include news reporting, TV/radio advertising, drama, documentaries and sports. Students will have the opportunity to utilize their writing skills in many of the aforementioned areas.

3 Class Hours; Prerequisite: ENG 110 Written Expression I

COM 125 Introduction to Audio Theory and Production (3)

Introduction to the Basic aspects of technical and production techniques of audio systems, including microphone, speaker, amplifier, recording and playback theory, placement and operations. Special emphasis will be given to the use of audio equipment including taping, editing, and duplicating.

•All asterisked (*) courses are taught evenings only and when enrollment permits.

COM 130 Introduction to Video Theory and Production (3)

Introduction to the basic aspects of technical and production techniques of television. Emphasis will be placed on theory and use of television equipment, staging, lighting, television graphics, scripting basic engineering, distribution systems and studio personnel. In addition to the student produced and directed assignments, members of the class will participate in production crews.
3 Class Hours

COM 135 Selection, Evaluation and Utilization of Media (3)

Introductory course to help the student choose the most practical mode of media for communicating an idea or objective. Hardware and software will be demonstrated, discussed and made available for "hands on" utilization by students. Evaluation of audio-visual/LRC media to guide the student in effective utilization of instructional media materials and equipment. Students will prepare some media materials for the course.
3 Class Hours

COM 200 Image Theory for Film Photography and Television (3)

Study of important theories of image production and effectiveness. Survey of several significant photographers, filmmakers, and television artists and their work. Emphasis on the formal elements of the still and moving image and their psychological and aesthetic effects.
3 Class Hours

COM 205 Introduction to Filmmaking (3)

Introduction to the craft of filmmaking and motion picture production. A hands-on approach to the principles of cinematography, including formats, film stocks, lighting, and camera operation. Students will learn the production techniques involved in silent, single-system and double-system filmmaking, as well as sound recording, editing, and shooting film for video transfer and postproduction. Script writing, crew positions and responsibilities, and working with on-camera talent will also be covered. Students will be expected to complete a brief film project either individually or as a group, and must pay their own film and lab fees.
2 Class Hours, 2 Laboratory Hours

COM 210 Advanced Video Production (3)

This course stresses the application of basic video production theory and techniques as they apply to a variety of productions such as Advertisements, News, Drama, Sports or other such events. Students will be responsible for ideas, scripting, design, production, editing and evaluation of final projects. Both studio and portable systems will be available for student use.
2 Class Hours, 2 Studio Hours; Prerequisite: COM 130 Introduction to Video Theory and Production

COM 250 Internship (2-3)

Placement in a communications related job. Involves in addition to job requirements, directed reading, meetings with the intern supervisor, and written assignments. Internships are not paid positions.

COM 266 Acting for TV, Film and Commercials (3)

Proficiency in performing before the camera. Character analysis, quick-study, retakes, voice-overs, studio projection, facial nuances, and subtlety of mannerism.
2 Class Hours, 2 Studio Hours

COM 299 Independent Study (1-3)

An individual student project concerned with advanced work in a special area of communication. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course. (Requires application and approval.)
Prerequisite: 3 semester hours of college level work in communications

CRJ 101 Introduction to Criminal Justice (3)

Overview of the major components of the criminal justice system: law enforcement, prosecution, trial courts and corrections. A systems approach is utilized with an emphasis on the structure, functions and independence of these and other criminal justice system components.
3 Class Hours

CRJ 105 Introduction to Corrections (3)

Overview of the corrections components of the criminal justice system, tracing the history of corrections in the United States. Relationships and interdependencies of corrections with the court and law enforcement components of the criminal justice system and a discussion of the theoretical basis for the four major types of correctional models.
3 Class Hours

CRJ 115 Juvenile Justice System (3)

Overview of the juvenile system, including the history, process, status and philosophy of the juvenile court. Law enforcement handling of juveniles, various theories of delinquency causation, correctional programs and alternative methods of dealing with juvenile offenders.
3 Class Hours

*CRJ 125 Penal Law (3)

Essential elements of the various crimes under the New York State Penal Law. The concepts of culpability and criminal defenses recognized under the New York State Penal Law as they relate to murder, rape, robbery, burglary, arson, assault, drug offenses, disorderly conduct and harassment.
3 Class Hours

*CRJ 130 Introduction to Security (3)

Organization and management of the security function in industry, business, government and institutions. The protection of personnel, facilities and other assets, as well as administrative, legal and technical problems of loss prevention and control.
3 Class Hours

*CRJ 212W Criminal Procedure and Constitutional Law (3)

The right to counsel, search and seizure, confessions, lineups, electronic surveillance, probation and parole. Writing Emphasis Course.
3 Class Hours; Prerequisite: ENG 110

*CRJ 215 Police Administration (3)

Fundamentals of organization, supervision and overall management of police and civilian personnel. Designed to supply a background for the students in dealing with the complexities involved in the management aspect of various police agencies.
3 Class Hours; Prerequisite: CRJ 101 Introduction to Criminal Justice

*CRJ 225 Security Administration (3)

Administration of public and private security efforts: problems in protection program development and evaluation, functions of various levels of personnel, company/organizational relations, documents and personnel access control, detection systems, devices, and equipment, emergency and disaster planning, new directions in the field of security.
3 Class Hours

*CRJ 230 Criminal Investigation (5)

Basic principles of investigation as they relate to the collection, preservation, identification and examination of physical evidence. Techniques for locating and interviewing witnesses and interrogating suspects. (Currently being revised.)
3 Class Hours; 2 Lab Hours taught off-campus. Prerequisites: CRJ 101 Introduction to Criminal Justice

*CRJ 255 Special Topics in Criminal Justice (1-3)

The specific area to be covered will be based upon identified needs and interests of criminal justice students. This course also provides a forum for professional individuals in the criminal justice field with a particular expertise to share their knowledge and skills with students. Special topics have included Criminalistics, Police Community Relations, Drug Law, Current Legal Issues, and Domestic Violence.
1-3 Class Hours; Prerequisites: CRJ 101 Introduction to Criminal Justice.

CRJ 260 Organized Crime (3)

Role of legal system in organized crime control, preventative methods, political influences; white collar crime, methods of intelligence gathering; relationships of organized crime to community social structure.
3 Class Hours; Prerequisite: CRJ 101 Introduction to Criminal Justice or permission of chairperson

CRJ 299 Independent Study (1-3)

An individual student project concerned with advanced level work beyond the scope or breadth of regular courses. A specific area or topic is investigated under the direction of a faculty member. Must be approved by department chairperson.
Prerequisites: CRJ 101 Introduction to Criminal Justice and 6 credits in CRJ courses

CST 101 Orientation (0)

An opportunity for students to receive information about advisement and registration, transfer, study skills and department policies. Speakers from Broome Community College, from other colleges, and from business and industry also may be scheduled. All freshman Computer Studies students are required to complete this course.

CST 105 Understanding Computers** (3)

An introductory course in computer concepts. An integrated software package will be used to familiarize students with word processing, spreadsheets, and file management. Commercial packages from the student's area of concentration may be presented.
2 Class Hours, 2 Laboratory Hours
**Students cannot receive credit for both CST 105 and CST 107

CST 107 Business Applications on the Microcomputer** (3)

Use of business applications software on the IBM-PC. Hands-on experience with word processing, spread sheets and databases using the computer as a problem solving tool. Commercial versions of popular applications software may be explained and demonstrated.
3 Class Hours; Prerequisite: BUS 100 Accounting I and a proficiency in Typing.
**Students cannot receive credit for both CST 105 and CST 107

•All asterisked (*) courses are taught evenings only and when enrollment permits.

CST 108 Programming in BASIC (3)

Introduction to computer programming using BASIC on the IBM-PC. No previous programming experience is necessary. Topics include input-output statements, IF-THEN statement, FOR-NEXT loops, WHILE loops, subscribed variables, string manipulation. Modular development and self-documentation will be emphasized. MAY NOT BE TAKEN FOR DEGREE CREDIT BY COMPUTER STUDIES STUDENTS.

2 Class Hours, 2 Laboratory Hours; Prerequisite: MAT 092 Introduction to the Concepts of Algebra or equivalent

CST 115 Introduction to Pascal (3)

Introduction to the fundamentals of structured programming using Pascal. Topics may include input-output statements, data types, loop structures, procedures and functions. Lab assignments emphasize program development using modular design and self-documentation. Programming will be done using Turbo Pascal.

2 Class Hours, 2 Laboratory Hours; Prerequisite: MAT 092 Introduction to the Concepts of Algebra or equivalent and an introduction to computing course or equivalent

CST 116 RPG II and RPG III (3)

Fundamentals of RPG (Report Program Generation), a language used by many small business installations. Topics include specification sheets, internal logic, control breaks, branching, tables and table look-up. Lab assignments will be done in RPG II. Additional topics from RPG III will be discussed.

2 Class Hours, 2 Laboratory Hours; Prerequisite: An introduction to computing course

CST 117 Language Independent Design Tools (2)

An introduction to proper design techniques for structured programming languages. This course presents several Language Independent design tools. Topics covered include: modular design, logic flow representation techniques, how to perform a proper trace, subroutines, Binary and Hexadecimal arithmetic, and other fundamentals of software engineering.

2 Class Hours; Pre or Corequisites: MAT 139 College Algebra or equivalent and a high school computer course or equivalent. Suggested Corequisite: CST 132 Structured Programming in Pascal or CST 128 Structured Programming in COBOL

CST 118 Introduction to COBOL (3)

Introduction to the fundamentals of structured programming using COBOL. Business-oriented lab problems will be assigned. Topics include structured design, use of files, report generation, control breaks, interactive techniques.

2 Class Hours, 2 Laboratory Hours; Prerequisite: MAT 092 Introduction to the Concepts of Algebra or equivalent and an introduction to computing course

CST 119 Computer Concepts and Applications (3)

A foundation course for computer studies majors who have had some exposure to computers. The lecture covers basic concepts in computers, the lab introduces the major end user software applications. Content includes computer hardware: input and output devices, memory, CPU, classification of computers; networks; historical development; social and ethical implications of computer: employment, crime, privacy. Lab exercises include word processing, file management, spreadsheets, graphics and operating systems. Students should have completed a high school computer science course or the equivalent.

2 Class Hours, 2 Laboratory Hours; Prerequisite: High School Computer Course or equivalent and MAT 092 Introduction to Concepts of Algebra or equivalent

CST 122 Scientific Computer Programming — FORTRAN (3)

Introduction to problem solving techniques using FORTRAN including development of an algorithm, flow charting, program writing, debugging, storage, and execution, input and output, loop techniques, array manipulation, file control and control of on-line equipment, structured programming, terminal and batch operations. Material to be covered taken from student's area of study. For Engineering Technology students.

2 Class Hours, 2 Laboratory Hours; Prerequisite: Working knowledge of algebra and trigonometry

CST 128 Structured Programming in COBOL (4)

Problem solving using the structured programming techniques of COBOL. Top down design is emphasized. Programming steps include program definition, structure charts, coding, debugging, testing and validation, documentation and program maintenance. Topics include file handling, looping, program modularization, control breaks, tables, and interactive programming. Lab assignments reflect common business applications.

3 Class Hours, 2 Laboratory Hours; Prerequisite or Corequisite: CST 117 Language Independent Design Tools, and MAT 139 College Algebra or equivalent

CST 132 Structured Programming in Pascal (4)

Problem solving using the structured programming techniques of Pascal. Top down design and modular structure will be emphasized. Programming steps include program definition, structure charts, coding, debugging, testing and validation, documentation, program maintenance. Topics covered include loop structures, procedures, functions, scalar and ordinal types, arrays, records, and text files. Lab assignments will require modular structured programming.

3 Class Hours, 2 Laboratory Hours; Prerequisite: MAT 139 College Algebra or equivalent; Prerequisite or Corequisite: CST 117 Language Independent Design Tools

CST 140 Computer for Chemists (3)

Introduction to the application of microcomputers to solve problems in chemistry. Topics include scientific word processing emphasizing chemical applications, the principles of structured programming using BASIC, chemical graphing utilizing the student's own laboratory data along with linear and non-linear regression will be introduced using spreadsheets, and file transfer between microcomputer application programs and utilizing the college's mainframe computer network to simulate a CIM environment. FOR CHEMICAL ENGINEERING TECHNOLOGY STUDENTS.

2 Class Hours, 2 Laboratory Hours; Corequisite: CHM 162 Chemistry or CHM 146 Chemistry and MAT 162 Applied Calculus or MAT 181 Calculus I with Analytic Geometry or permission of Chemistry Department Chairperson

CST 141 FORTRAN Programming with Graphic Applications (3)

Introduction to problem solving techniques using FORTRAN. Development of steps to solve a problem (algorithm), use of text editor, terminal operation, file storage and retrieval, program writing, debugging, execution and program documentation. Components include input/output, formatting, look techniques, array manipulation, use of complex numbers, subroutines, sequential access data files. Graphic applications include figure creation, scaling, plots of X-Y data, equations and polar plots. FOR ELECTRICAL ENGINEERING TECHNOLOGY STUDENTS.

2 Class Hours, 2 Laboratory Hours; Corequisite: MAT 161 Precalculus

CST 155 C Programming for Programmers (3)

This course assumes a complete understanding, and experience with High-Level Language programming concepts. The course is designed to quickly take the student through necessary C syntax, on to more advanced topics. Topics covered will include: C Overview, variables, constants, program control, arrays, structures, functions, preprocessors, pointers, input/output and object-oriented programming (OOP).

2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 132 Structured Programming in Pascal, or CST 128 Structured Programming in COBOL: with a minimum grade of "C" or better

CST 158 Spreadsheets With Financial Applications (3)

An introduction to commonly encountered financial calculations which can be done efficiently with a spreadsheet package. Topics include interest problems, amortization, capital depreciation, break-even analysis, and forecasting. Labs will be done using Lotus 1-2-3.

2 Class Hours, 2 Laboratory Hours; Prerequisite: MAT 139 College Algebra or equivalent and an Introduction to Computing Course

CST 160 ADA Programming (3)

Introduction to module programming techniques using the ADA programming language. Presentation of the SYNTAX of the language. Emphasis will be made on the unique features of this language which includes generic subprograms and packages, private and access types, tasking, parallel computation and exception handling.

2 Class Hours, 2 Laboratory Hours; Prerequisite: MAT 161 Precalculus or equivalent and one of the following: CST 132 Structured Programming in Pascal, CST 128 Structured Programming in COBOL, CST 115 Introduction to Pascal or permission of the instructor

CST 170 Digital Logic (3)

Comprehensive coverage of basic gates, Boolean algebra, Karnaugh mapping and Quine McCluskey technique for circuit simplification. Adders, subtractors, multiplexers, code converters, asynchronous and synchronous counters presented in detail as basic computer building blocks. Analog-digital and digital-analog interfacing. Lab exercises utilize TTL and CMOS chips.

2 Class Hours, 2 Laboratory Hours; Prerequisite or Corequisite: CST 132 Structured Programming in Pascal and CST 117 Language Independent Design Tools

CST 180 FORTRAN, A Second Course (3)

For students with previous programming experience in another programming language. Problem solving using structured FORTRAN. Complete program development including definition, FORTRAN coding, debugging and testing. Full documentation required for each program including a structure chart and a program logic manual. Topics include: loop and branch structures, arrays, subprograms, data types, formatted and list directed input/output, data structures, sequential and random access files, buffers and unformatted input/output. May include techniques in creating graphics drivers.

2 Class Hours, 2 Laboratory Hours; Prerequisite: A Structured Programming course or permission of instructor

CST 181 IBM Assembler Language (3)

IBM mainframe assembler language hardware and software overview. Topics include program design, testing and debugging, documentation and execution, addressing, standard linkage conventions, input/output techniques and data sets, instruction formats, machine and assembly code, data storage and boundaries, logical instructions, fixed-point binary arithmetic, decimal arithmetic, subroutines, branching and looping, macros.

2 Class Hours, 2 Laboratory Hours; Prerequisites: Introduction to computer programming course and at least one intensive structured programming language course

CST 200 Systems Analysis I (3)

A first course dealing with the principles of systems analysis and problem solving, concentrating on investigation and analysis of systems and their resulting design. Emphasis on the importance of standards, procedures, documentation and design tools. A variety of group and individual lab assignments will include analysis and design tools, prototyping and CASE.

2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 128 Structured Programming in COBOL or CST 132 Structured Programming in Pascal

CST 201 Systems Analysis II (3)

Continuation of the principles of systems analysis with a concentration on systems development, implementation and evaluation. A team case study approach is used to develop a system according to principles of structured Analysis and Design. Programs will be written using database software and structured programming techniques. Writing emphasis Course.

2 Class Hours, 2 Laboratory Hours; Prerequisite: "C" grade or better in both CST 213 Database Systems and CST 200 Systems Analysis I

CST 202 Advanced Pascal with Data Structures (3)

Static and dynamic data structures. Choice of proper structure to organize data. Topics include arrays, records, files, linked lists, trees, stacks, queues, directed graphs. Lab work will introduce applications of the topics and will be done in turbo Pascal. Structured modular programming and extensive documentation are required. Writing Emphasis Course.

2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 132 Structured Programming in Pascal with a grade "C" or better

CST 213 Database Systems (3)

An introductory course in database management with a focus on the effective use of database systems, database design principles, and database security and protection. Labs will use a relational database system and include database queries, creating and indexing tables, application development and programming. Students will also be exposed to SQL.

2 Class Hours, 2 Laboratory Hours; Prerequisite: A structured programming course or permission of instructor

CST 214 Computer Operations: Procedures and Management (3)

A broad based course introducing the concepts of operations and scheduling in the computer center environment. An overview of some of the concepts of operating systems. This course will NOT involve writing operating system programs. Topics include Job Control Language, command files, computer center operations, scheduling, high-level programming tools. Labs will provide hands-on experience with operations and systems.

2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 128 Structured Programming in COBOL or CST 132 Structured Programming in Pascal

CST 218 Advanced COBOL (3)

A second course in the use of the COBOL language as a means of implementing computerized solutions to business & information processing problems. Topics include batch and interactive processing, various file access techniques, use of advanced language statements and common utilities such as library functions, copy statements and subprograms. Writing Emphasis Course.

2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 128 Structured Programming in COBOL with "C" grade or better

CST 220 Microprocessors and Assembly Language Programming (3)

This course includes an introduction to the 32-bit Intel 80486/80386 architecture with programming techniques utilizing the Intel microprocessor and coprocessor family. Concepts include: programming modes, branching, flags, stacks, procedures, macros, interrupts, arithmetic and logic operations, multiple precision arithmetic and string operations. Extensive laboratory work is done on small systems.

2 Class Hours, 2 Laboratory Hours; Prerequisite: One structured programming language; Co- or Prerequisite: CST 170 Digital Logic

CST 225 Introduction to Small Systems (3)

Introduction to the concepts and implementation of small computer systems. Topics include hardware and software techniques, keyboards, display terminals, printers, graphics magnetic storage, disk drives, disk operating systems, telecommunications techniques, and networking. Extensive use of a small system in the laboratory will reinforce classroom concepts. Writing Emphasis Course.

2 Class Hours, 2 Laboratory Hours; Prerequisite: CST 220 Microprocessors and Assembly Language Programming and CST 132 Structured Programming in Pascal

CST 228 C — Fundamentals, Applications & Techniques (3)

This course is a natural extension to CST 155, C Programming for Programmers. You will continue to develop your programming skills in C and also be introduced to the C++ language. Topics include: Argument passing to external assembly language procedures, techniques for hardware interfacing, features common to C and C++ programming features, an introduction to object-oriented programming (OOPS), and developing applications for a graphical windows based environment. Extensive laboratory work includes hardware interfacing, developing graphics programs, C++ programming and more.

2 Class Hours, 2 Laboratory Hours; Prerequisites: CST 155 C Programming for Programmers, Pre or Co-requisite and CST 220 Microprocessors and Assembly Language Programming (Both courses must be completed at BCC)

CST 297 Cooperative Work Experience (1-3)

Cooperative education in computing may be available. On-the-job experience may be obtained by working with business, industries, and offices whose operations require the use of computers. To be eligible a student must maintain a cumulative grade point average of 2.5 with a 3.0 average in CST courses and have no "F" grades.

CST 299 Independent Study (1-3)

The student undertakes an independent project, under the guidance of a faculty member, which is beyond the scope of courses currently offered by the department. Only one independent study project allowed per semester.

DEN 101 Dental Hygiene I (2)

Introduction to skills utilized in the practice of dental hygiene, including infection control procedures, patient assessment and patient treatment.

2 Class Hours; Corequisite: DEN 101L Dental Hygiene Laboratory

DEN 101L Dental Hygiene Laboratory (2)

Development of dental hygiene skills including infection control protocol, patient assessment and instrumentation on student patients in the clinical setting.

8 Laboratory Hours; Corequisite: DEN 101 Dental Hygiene I

DEN 102 Dental Hygiene II (4)

Continuation of DEN 101 Dental Hygiene I. Theory in dental hygiene care including assessment, planning, implementation and evaluation of patient care, care of medically compromised patients, ethics, jurisprudence, emergency medical and dental procedures, and oral physiotherapy and oral health instruction. Writing Emphasis.

4 Class Hours; Prerequisites: DEN 101 Dental Hygiene I, and DEN 103 Oral Anatomy and Physiology; BIO 131 Human Biology I or permission of the department; Corequisite: DEN 102L Dental Hygiene Clinic

DEN 102L Dental Hygiene Clinic (2)

Clinical dental hygiene practice with emphasis on patient assessment, treatment planning, instrumentation and oral health instruction.

9 Laboratory Hours; Corequisite: DEN 102 Dental Hygiene II

DEN 103 Oral Anatomy and Physiology (2)

Normal structure and function of the oral cavity (microscopic and gross).

2 Class Hours; Corequisite: DEN 103L Oral Anatomy and Physiology Laboratory

DEN 103L Oral Anatomy and Physiology Laboratory (2)

Laboratory work provides experience with microscopic and macroscopic study of structures in the oral cavity.

4 Laboratory Hours

DEN 106 Clinical Dental Radiography (1)

Radiation physics and biology; understanding of radiation health, safety and protection; radiograph film quality, intraoral dental radiographic techniques, film processing and mounting, interpretation of radiographic factors and recognition of anatomical landmarks.

1 Class Hour; Prerequisites: DEN 101 Dental Hygiene I, DEN 103 Oral Anatomy and Physiology; BIO 131 Human Biology I or permission of the instructor; Corequisite: DEN 106L Clinical Dental Radiography Laboratory

DEN 106L Clinical Dental Radiography Laboratory (1)

Practical application of principles described in lecture mode on mannequins and adult patients.

2 Laboratory Hours; Corequisite: DEN 106 Clinical Dental Radiography

DEN 110 Dental Materials (3)

Composition, chemical and physical properties and use of materials used in dental laboratory and operatory. Laboratory sessions will provide experience in performing common dental laboratory procedures and background for clinical application of expanded functions.

2 Class Hours, 3 Laboratory Hours; Prerequisite: DEN 103 Oral Anatomy and Physiology or permission of the instructor

DEN 201 Dental Hygiene III (2)

Continuation of DEN 102 Dental Hygiene II. Integration of theory with clinical experience in various oral hygiene preventative procedures. Emphasis on planning and execution of the total patient treatment.

2 Class Hours; Prerequisites: DEN 102 Dental Hygiene II, DEN 106 Clinical Dental Radiography, DEN 110 Dental Materials, BIO 160 Microbiology, BIO 131 Human Biology I and BIO 132 Human Biology II; CPR Certification AHA. Provider C; Corequisite: DEN 201L Dental Hygiene III Clinic

DEN 201L Dental Hygiene III Clinic (3)

Clinical dental hygiene practice.

12 Laboratory Hours; Corequisite: DEN 201 Dental Hygiene III

DEN 202 Dental Hygiene IV (2)

Continuation of DEN 201 Dental Hygiene III. Comprehensive clinical experience in all phases of dental hygiene practice. Introduction to computer use in dental office management.

2 Class Hours; Prerequisites: DEN 201 Dental Hygiene III, DEN 204 General and Oral Pathology, DEN 205 Periodontology and DEN 209 Nutrition; Corequisite: DEN 202L Dental Hygiene IV Clinic

DEN 202L Dental Hygiene IV Clinic (3)

Clinical dental hygiene practice.

12 Laboratory Hours; Corequisite: DEN 202 Dental Hygiene IV

DEN 204 General and Oral Pathology (3)

Broad picture of the disease process through the study of common general diseases, their cause, results and treatment. Emphasis on the principles of inflammation, healing and repair, oral disease, their causes, recognition and treatment.

3 Class Hours; Prerequisites: DEN 102 Dental Hygiene II, BIO 132 Human Biology and BIO 160 Microbiology or permission of the instructor

DEN 205 Periodontology (2)

Overall study of the pathology of the supporting structures surrounding the teeth. Special emphasis on recognition and treatment of the periodontal patient within the scope of the dental hygienist.

2 Class Hours; Prerequisites: DEN 102 Dental Hygiene II, DEN 106 Clinical Dental Radiography, BIO 132 Human Biology II and BIO 160 Microbiology or permission of the instructor

DEN 206 Dental Pharmacology (2)

Pharmacology as it affects the clinical practice of dental hygiene and dentistry. Drugs commonly used in dentistry and correct methods for their use. Emphasis on pharmacological aspects of anesthesia.

2 Class Hours; Prerequisite: DEN 201 Dental Hygiene III or permission of the instructor

DEN 209 Nutrition (3)

Basic nutrition principles, including metabolism, functions, sources, and conditions resulting from excessive or inadequate intake of each nutrient. Study of diet planning, dietary guidelines, weight control, nutrition care throughout the life cycle, and current nutrition topics. Special emphasis on the relation of nutrition to the oral cavity, interviewing, nutritional counseling, computer aided dietary analysis, and its practice in the dental office. Writing Emphasis Course.

3 Class Hours; Prerequisite: DEN 102 Dental Hygiene II or permission of the instructor

DEN 213 Public Health (3)

Principles of public health and fundamentals of assessing, planning, implementing and evaluation of public health care with emphasis on community dental health. Laboratory experience emphasizes reading scientific literature, statistics and community health education, and community health agencies.

2 Class Hours, 2 Laboratory Hours; Prerequisite: DEN 102 Dental Hygiene II

DEN 214 Current Topics In Dental Hygiene (2)

Topics relevant to the contemporary practice of dental hygiene including; career planning, professional interpersonal relationships, indentification and reporting of child abuse, the hygienist's role in marketing dentistry and dental hygiene and in the practice of dental specialties. Students are required to observe a minimum of two dental specialty practices.

2 Class Hours; Prerequisite: DEN 201 Dental Hygiene III or permission of the instructor

DEN 298/299 Independent Study — Fall/Spring (1-3)

Advanced studies in Dental Hygiene conducted under the guidance of a Dental Hygiene instructor.

Prerequisites: DEN 101, 102 Dental Hygiene I and II and permission of Department Chairperson

DIA 101 Nutrition (3)

The social, cultural, psychological and physiological functions of food. Nutrition care throughout the life cycle. Special consideration given to modifications of the basic diet to meet the needs of the resident in health care facilities. Techniques of interviewing, medical ethics and documentation procedures of medical records. Employment Prerequisite.

2 Class Hours, 4 Directed Practice

DIA 102 Institutional Food Preparation (3)

Principles of food preparation, standardization of recipes, menu structure and planning. Servicing, merchandising and promotion of food items. Emphasis on sanitation and safety practices in food service departments. Employment Prerequisite.

DIA 201 Food Management Systems (3)

Introduction to the health field and its interrelationships. Control through specification, purchasing, inventory, cost analysis. Equipment maintenance and management safety practices are addressed. Employment Prerequisite.

2 Class Hours, 4 Directed Practice

DIA 202 Personnel Management (3)

Leadership and supervisory techniques. Concepts of management are addressed, including the principles of organization, evaluation, and the decision-making process. Implications of authority and responsibilities. Understanding and communications with workers and co-workers. Employee recruitment, training and evaluation. Morale and labor relations. Employment Prerequisite.

2 Class Hours, 4 Directed Practice

DOT 100 Keyboarding (1)

Development of basic skills in keying exact copy by touch for three minutes with a maximum of 3 errors on the IBM Personal Computer.

3 Class Hours, 5-Week Course

DOT 103 Keyboarding (3)

Development of basic keyboarding techniques and skill building activities in order to attain speed and accuracy in keying exact copy by touch for 5 minutes with a maximum of 5 errors.

2 Class Hours, 3 Laboratory Hours; Prerequisite: For international students, ENG 107 English as a Second Language or permission of instructor

DOT 105 Keyboarding Skill Development (1)

Continued development of skills in keying exact copy by touch. Activities will be self-paced to allow for individual goals.

3 Class Hours, 5-Week Course; Prerequisite: DOT 100 Keyboarding or equivalent

DOT 106 Development Keyboarding Production (1)

Development of basic techniques in preparing letters, horizontal and vertical centering exercises, memorandums, tabulations, and manuscripts.

3 Class Hours, 5-Week Course; Prerequisite: DOT 105 Keyboarding Skill Development

DOT 109 Basic Transcription (3)

Designed to improve understanding of basic sentence structure, grammar, business vocabulary and punctuation as related to the business world. Practical application through exercises at the keyboard on rough draft copy.

3 Class Hours; Prerequisite or Corequisite: DOT 103 Keyboarding

DOT 110 Shorthand (3)

Beginning course in Gregg Shorthand, Centennial System. Basic principles to promote the ability to read fluently from plates and notes. Longhand and keyboard transcription from shorthand notes dictated from unfamiliar material at a minimum rate of 40 words a minute.

2 Class Hours, 3 Laboratory Hours; Prerequisite or Corequisite: DOT 103 Keyboarding

DOT 112 Speedwriting (3)

Basic Speedwriting principles to promote the ability to read fluently from plates and notes. Longhand and keyboard transcription from shorthand notes dictated from unfamiliar material at a minimum of 40 words a minute.

3 Class Hours, 2 Laboratory Hours; Prerequisite or Corequisite: DOT 103 Keyboarding

DOT 113 Shorthand/Speedwriting Transcription (3)

Emphasis on Shorthand/Speedwriting skill building at a minimum rate of 60 words a minute. Integration of correct usage of principles of grammar, spelling, punctuation, capitalization, vocabulary, numbers, word division, words often confused.

2 Class Hours, 3 Laboratory Hours; Prerequisite: DOT 110 Shorthand or DOT 112 Speedwriting, DOT 103 Keyboarding, DOT 109 Basic Transcription

DOT 115 Shorthand/Speedwriting Skill Development (1)

Continued development of skills in reading and writing shorthand or speedwriting notes. Activities will be self-paced to allow for individual goals.

3 Class Hours, 5-Week Course; Prerequisite: Knowledge of basic shorthand or speedwriting

DOT 120 Word Processing Applications Using WP5.1 (3)

Development of speed, accuracy, and text editing skills using a full-featured word processing program.

2 Class Hours, 3 Laboratory Hours; Prerequisite: DOT 103 Keyboarding or ability to key exact copy at 36 NWPM by touch for 5 minutes with a maximum of 5 errors

DOT 130 Freshman Seminar (1)

Introduction to the College and department policies and procedures. Discussions pertaining to the Department of Office Technologies options and career paths. A review of the College's services available for students.

1 Class Hour

DOT 141 Word/Information Processing Concepts (3)

Introductory course for the preparation of information processing specialists. Emphasis on terminology and technology of the automated workplace.

3 Class Hours

DOT 145 Introduction to Desktop Publishing (1)

Learn how to use an IBM-PC, a mouse, and PageMaker software to design, create, and print out a one-page flyer. You will combine both text and graphics in the creation of this publication. The planning and design phases will be emphasized, and the final output will be printed on a Laser printer.

3 class Hours, 5-Week Course

DOT 151 Business Communications (3)

Development of desirable written and oral communication style. Review of basic writing mechanics. Composition of letters of inquiry and replay, claim and adjustment, credit and collection, sales and promotion, application. Memorandums, resumes, news releases, short reports, telegrams.

3 class Hours; Prerequisites: DOT 103 Keyboarding and DOT 109 Basic Transcription

DOT 214 Introduction to Information Management (3)

Comparison of traditional and electronic filing systems. Advanced word processing and desktop publishing using WP5.1.

1 Class Hour, 4 Laboratory Hours; Prerequisite: DOT 120 Word Processing Applications using WP5.1

DOT 215 Information Processing Using Lotus 1-2-3 (3)

Students are taught to prepare spreadsheets, a data base and graphs using the functions of Lotus 1-2-3.

3 Class Hours; Prerequisite: DOT 103 Keyboarding or the ability to key exact copy at 36 NWPM by touch for 5 minutes with a maximum of 5 errors

DOT 220 Principles of Information Processing Management (3)

Principles of managerial practices emphasizing a team approach. Electronic equipment and software will be used in management decision making and dissemination of information to a variety of audiences.

3 Class Hours; Prerequisite: DOT 214 Introduction to Information Management and DOT 215 Information Processing Using Lotus 1-2-3

DOT 231 Shorthand/Speedwriting Transcription Applications (3)

Emphasis on production of mailable keyboard transcripts and on increasing Shorthand speeds. Transcription at the keyboard from notes dictated from unfamiliar material at a minimum of 80 words per minute.

2 Class Hours, 3 Laboratory Hours; Prerequisite: DOT 113 Shorthand/Speedwriting Transcription or equivalent, DOT 120 Keyboarding/Word Processing Applications, DOT 151 Business Communications

DOT 236 Machine Transcription (3)

Emphasis on increasing skill transcribing recorded materials. Continuing development of knowledge of business vocabulary, correct usage of principles of grammar, punctuation, spelling in the machine transcription of business documents.

3 Class Hours, 2 Laboratory Hours; Prerequisite: DOT 109 Basic Transcription and DOT 120 Keyboarding/Word Processing Applications

DOT 242 Office Procedures (3)

Final preparation for an office career. Business activities related to word processing, postal and shipping services, telephone procedures, travel arrangements, planning meetings, banking services, interviewing.

3 Class Hours: Prerequisites: For Word/Information Processing Students — DOT 151 Business Communications, DOT 214 Introduction to Information Management and DOT 236 Machine Transcription. For Executive Secretarial Students — DOT 151 Business Communications and DOT 214 Introduction to Information Management

DOT 260 Office Technology Practicum (2)

Secretarial students are required to work at least four hours weekly in order to gain practical working knowledge by producing various types of communications.

4 Laboratory Hours; Prerequisites: DOT 214 Introduction to Information Management and DOT 215 Information Processing Applications I

Note: This is a capstone course and must be taken during the student's final semester of DOT courses.

DOT 262 Dynamics of Success (1)

A seminar designed for any student who wishes to develop an extra edge in landing that first job, in getting that promotion, and in being more effective in personal and professional settings. Topics include goal setting, time management, power communication skills, assertiveness, self-esteem, self-image, and self-confidence, power/executive dressing, job campaign techniques, and professionalism.

1 Class Hour

DOT 299 Independent Study (1-4)

Under the guidance of a faculty member, the student will undertake a study, project, or research involving an advanced concept or problem relating to her/his major field of study. Only one independent study course is allowed per semester.

Prerequisite: Approval of faculty member and department Chairperson

*ECE 100 Introduction to Education of Young Children (3)

An overall view of early childhood education including various philosophies and methods, programming, scheduling. Focus on social, emotional and physical needs of young children and the importance of the "self concept" for both the child and the adult working with young children. Introduction to the College's Early Childhood program covering requirements, courses, and career information. A required number of observations in pre-schools, nurseries and day care centers in the area. Required of Early Childhood Majors.

3 Class Hours

ECE 101 Introduction to Family Day Care (1)

Introduction of principles of licensed family day care including preparing the home as a learning setting, activity planning and guidance of mixed age groups, small business management and parent/provider relationships.

3 Class Hours - 5 Weeks

ECE 102 Introduction to Working in School Age Child Care (1)

Developmental characteristics of 5-12 year olds, programming for that age in extra-school settings, preparing the environment for safety and learning, and appropriate guidance of school age children in groups.

3 Class Hours - 5 Weeks

ECE 103 Introduction to Working With Special Needs Children (1)

Identification and implications of state mandates for children with handicapping conditions. Explores the principles and practices of facilitating the learning of special need children in group settings. Parents' role in educational plan.

3 Class Hours - 5 Weeks

*ECE 115 Music for Young Children (3)

How to develop the whole child through the use of music. this course will be of practical application for the teacher. Various techniques and methods will be demonstrated through the use of songs, records, eurhythmics, rhythm instruments and creative activities. Class participation will be a vital part of this course. Students will be expected to apply these various methods and activities with young children.

3 Class Hours

ECE 120 Curriculum Development (3)

Implementation of early childhood curriculum per developmental level in art, music, creative movement, language, mathematics, sciences, nutrition and health, manipulative play, and dramatics. Students are required to plan and present activities that recognize the "whole child" (socially, emotionally, cognitively, creatively, and physically) and his/her developmental abilities. Required of Early Childhood Majors.

2 Class Hours, 2 Laboratory Hours; Prerequisite: ECE 100 Introduction to Education of Young Children or Concurrent Enrollment

*ECE 140 Art for Young Children (3)

In-depth coverage of art education as it contributes to the pre-school child's emotional, physical and psychological growth. Needs of preschoolers in this area and ways to foster creativity and skill acquisition. Materials and methods appropriate for this age. A laboratory experience working pre-schoolers in art will be required.

2 Class Hours, 2 Laboratory Hours

*ECE 150 Motor Development (3)

Designed to give the student an understanding of normal motor development and how it relates to cognitive and perceptual development. Students will be exposed to programs and activities in motor development for young children.

3 Class Hours

•All asterisked (*) courses are taught evenings only and when enrollment permits.

ECE 175 Techniques of Observation and Evaluation (3)

Develops skills and methods of observing young children in structured and unstructured situations. Covers ethics, interpretations of children's behavior in light of development. Also record keeping techniques, projects using data gathered to evaluate children's abilities. Implications of evaluations. Required of Early Childhood Majors.
3 Class Hours

ECE 180 Child Health and Safety (3)

Designed to help students become aware of techniques for promoting general health care and safety standards at children's centers.
3 Class Hours

ECE 185 Child Guidance – Infants and Toddlers (1)

Moral and social development is the basis for establishing and maintaining cooperative behaviors in infants and toddlers for persons caring for them in groups. Non-punitive, internal control strategies will be presented.
Prerequisite: ECE 100 and PSY 110 or permission

ECE 186 Guidance of Preschoolers (1)

Moral and social development is the basis for establishing and maintaining cooperative behavior in preschoolers for persons caring for them in groups. Non-punitive, internal control, problem-solving strategies will be presented.
Prerequisite: ECE 100 and PSY 110 or permission

ECE 187 Child Guidance – Primary Age Children (1)

Moral and social development is the basis for establishing and maintaining cooperative behaviors in school age children K - grade 3 for persons caring for them in groups. Non-punitive, internal control strategies will be presented.
Prerequisite: ECE 100 and PSY 110 or permission

ECE 190 Infants, Toddlers and the Family (3)

The mother/father/baby triad and the challenges that parenting brings to the young family are examined. Single parents, parental attachment, adoption, positive self-image, infant stimulation, teen pregnancy, community support for families, toddler discipline, delayed pregnancy. Gives prospective parents and teachers of young children insight into this critical period of life.
3 Class Hours

*ECE 200W Practicum I (3)

Designed to meet the needs of both the experienced and the inexperienced students. The inexperienced student is placed in a classroom setting conducive to the learning of desired teacher competencies, working with an experienced supervising teacher. Six hours per week for 12 weeks in this situation. Self-evaluation as well as being evaluated by others. The experienced student continues working in early childhood setting. The practicum emphasizes self-evaluation according to classroom competencies. Both experienced and inexperienced students in group seminars with a college representative and meeting for individual consultation. Required of Early Childhood Majors. Writing Emphasis Course (currently being revised).
Prerequisite: 30 hours of counseled coursework. Taught Evenings, field work days

*ECE 201 Practicum II (4)

Designed to be flexible depending upon the needs and interest of the student. Approved projects for experienced students based on the development of these needs and interests. All students meet in group seminars for exchange of ideas. Inexperienced students use classroom situations to conduct self-evaluations of own competencies as teachers, and are evaluated by others, including an experienced supervising teacher. The inexperienced student to spend nine hours per week in a classroom situation for 12 weeks. Required of Early Childhood Majors. Students employed in early childhood setting continue at place of employment and are required to observe other centers (30 hrs. counseled course work).

*ECE 210 Special Problems in Children (3)

How to understand and help the child with a special problem. Normal adjustment problems, learning disabilities, physical handicaps, retardation and the emotionally disturbed child. Techniques for the classroom teacher and places to get help. Actual student involvement with children who exhibit these problems.
2 Class Hours, 2 Laboratory Hours; Prerequisite: PSY 211 Child Development (Concurrent Enrollment Considered)

*ECE 220 Issues and Innovations in Early Childhood Education (3)

An overview and insight into various philosophies and materials of education for young children, including Montessori, Piaget, open education (comparing English and American schools), affecting education, behavior modification. This course aims to develop the competency of the student through practical application.
3 Class Hours; Prerequisite: ECE 100 Introduction to Education of Young Children

ECE 221 Multi-Cultural Perspectives (1)

Methods of teaching and caring for children with unique cultural backgrounds, traditions, and practices. Helps to understand that since young children are increasingly aware of color, language, and gender differences, it is important to assist in building confident self-images that view differences with respect.
3 Class Hours - 5 Weeks

ECE 222 Community Resources (1)

Ways to find and utilize various community agencies, resources and programs that assist parents, children, and professional caregivers to obtain, integrate and use information, services, and benefits associated with day-care and pre-school centers.
3 Class Hours - 5 Weeks

ECE 223 Discipline Techniques (1)

Effective guidance and management methods used to develop acceptable behavior by children in the classroom or institutional setting. Field trip opportunitites provided.
3 Class Hours - 5 Weeks

ECE 224 Pre-School Mathematics (1)

Methods and materials used to present age-appropriate arithmetic and counting skills to pre-school children.
3 Class Hours - 5 Weeks

ECE 225 Pre-Reading (1)

Will focus on language behaviors and development of communication patterns upon which to\ foster the beginning of reading skills in pre-school children.
3 Class Hours - 5 Weeks

ECE 226 Pre-School Science (1)

Methods and materials used to present age appropriate science concepts to pre-school children.
3 Class Hours - 5 Weeks

*ECE 230 Working With Parents in Early Childhood Programs (3)

Designed to introduce the need for the parent's involvement in the education of the young child. Benefits for teachers and parents which help or hinder their working together. Various aspects of working with parents, such as home visiting, group parent meetings, newsletters and written communications, parent conferences and the use of volunteers in the classroom. Part of the course on a workshop basis, and students required to develop a special project to earn their third credit.
2 Class Hours, 2 Laboratory Hours; Prerequisite: ECE 100 Introduction to Education of Young Children

*ECE 245 Social Development of Young Children (3)

Explores the developmental, environmental and temperamental aspects of the socialization process. Topics include aggression, cooperation and sharing, moral development, peer interaction, sex-role development, communication in the classroom.
3 Class Hours

*ECE 250 Language in Early Childhood (3)

A developmental study of language growth in young children and its influence on learning (cognitive abilities, social and behavioral concepts). Contemporary language theories and programs including a diagnostic approach to teaching language (communications skills, reading readiness and literature appreciation) in the pre-school. The student will be expected to spend a number of hours in a special project requiring observation of individual children and language arts program.
3 Class Hours; Prerequisite: ECE 100 Introduction to Education of Young Children or Concurrent Enrollment

ECE 255 Special Topics in ECE (1-3)

Specific topics are based on need of ECE students and/or community. Provides a forum for EC professionals to share their unique knowledge and skills with students. Recent topics have included: Multi-cultured perspectives, community resources, Math for Young Children, pre-reading, and Discipline Techniques.
1-3 Class Hours; Prerequisite: ECE 100 or permission of the department

ECE 260 Management and Administration of Early Childhood Programs (3)

Overview of Early Childhood administration to include: Principles of management like planning, organizing, directing, and evaluating as uniquely applied to regular and special programs. Staff development, financial, and personnel policies relating to operation and administration of various types of centers.
3 Class Hours; Prerequisite: ECE 100

*ECE 299 Independent Study in Child Care (1-3)

An individual student project in child care beyond the scope of requirements offered by the department. Under the direction of a faculty member and approved by the program coordinator and department chairperson. No more than three credits may be acquired toward the Early Childhood degree in independent study projects.
1-3 Class Hours; Prerequisite: 6 Semester hours in Early Childhood courses

• All asterisked (*) courses are taught evenings only and when enrollment permits.

ECO 110 Introduction to Micro-Economics (3)

Supply, demand and the market system as they relate to contemporary economic problems including poverty, energy, the environment and urban decay. The allocation of resources under conditions of competition and various degrees of monopoly. Rationale behind anti-trust laws and other economic systems.
3 Class Hours

ECO 111 Introduction to Macro-Economics (3)

Causes of unemployment and inflation and the government's efforts to control them. Problems of economic growth as they relate to our economy and the other countries, developed and underdeveloped. International trade and finance problems.
3 Class Hours

ECO 299 Independent Study – Economics (1-3)

An individual student project in economics which is beyond the scope or requirements of the courses offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.
Prerequisite: 3 Semester hours in economics

EET 100 Introduction to Electrical Engineering Technology (1/2)

Introduction to Electrical Engineering Technology, career opportunities, transfer opportunities, study skills and college services. An association with industry is established through field trips and panel discussions involving industry representatives. Reasonable proficiency in the use of the hand-held calculator is developed. A scientific hand-held calculator is required for this course.
1 Class Hour

EET 110 Introduction to Electricity (3)

Basic electrical circuit elements including voltage sources, light bulbs, resistors, heater elements, capacitors, and inductors. Simple series and parallel resistive circuits. Time constants related to capacitors and inductors. Use of basic meters to measure voltage, current, and resistance. An introduction to the oscilloscope. Reading charts and tables. Use of computers and the BASIC language to solve simple circuit problems.
3 Class Hours

‡EET 111 Electrical Construction Laboratory I (2)

Advanced knowledge about today's electrical equipment. Experience in the installation, fabrication and maintenance of electrical equipment by means of "hands on" approach. Shop safety and the National Electrical Code. Basic residential and commercial wiring procedures, basic measuring techniques, fundamentals of basic machine operations. Safety glasses are required for this course.
1 Class Hour, 3 Laboratory Hours

EET 112 Electrical Construction Laboratory II (1)

Advanced wiring methods, fractional horsepower motor and appliance troubleshooting, introduction to residential and commercial lighting and power layout design. Safety glasses are required for this course.
3 Laboratory Hours; Prerequisite: EET 111 Electrical Construction Laboratory I

†EET 121 Electrical Circuits & Laboratory (4, 1)

Fundamentals of electrical circuits and application of circuit laws, theorems and measuring techniques to both DC and AC single and polyphase circuits.
4 Class Hours, 3 Laboratory Hours; Prerequisite or Corequisite: MAT 139 and MAT 140 or equivalent

*‡EET 125 Circuits I (3)

DC circuits, including loop and nodal analysis, superposition, Thevenin's and Norton's theorems, RL and RC time constants.
2 Class Hours, 2 Laboratory Hours; Prerequisite or Corequisite: MAT 139 Algebra or equivalent

*‡EET 126 Circuits II (3)

A continuation of the study of circuits concepts related to single- and three-phase alternating current. Resonance, network analysis, power.
2 Class Hours, 2 Laboratory Hours; Prerequisite or Corequisite: MAT 140 Trigonometry or equivalent and EET 125 Circuits I

EET 130 Engineering Drawing (1)

Principles of projection. Development of drafting skills, lettering and proper line construction. Dimensioning and tolerancing, with an emphasis on shop processes. Use of auxiliary views and sectioning. Preparation for assembly drawings, materials lists, schematic and wiring diagrams.
3 Laboratory Hours

†EET 150W Electronic Devices & Laboratory (4, 1)

A first course in Electronics introducing the devices fundamental to the field. Introduction of semiconductor diodes, bipolar and field effect transistors, thyristors, operational amplifiers, microprocessors. Design and analyze representative circuits based on these building blocks. Competency in FORTRAN computer language is required and is applied to generate software for design and analysis of related circuits. Writing Emphasis Course.
4 Class Hours, 3 Laboratory Hours; Prerequisites: MAT 161 Pre-calculus and CST 141 FORTRAN Programming with Graphic Applications and EET 121 Electrical Circuits & Laboratory

EET 162 Computer Aided Network Analysis (3)

Computer analysis of complex electric and electronic networks by application of network theorems and application of software as needed. Use of a second computer language to display the response of two port networks. Use of the computer to apply matrix methods to the analysis of complex circuits and the solution of network problems.
3 Class Hours; Prerequisites: CST 141 FORTRAN Programming with Graphic Applications and EET 121 Electrical Circuits & Laboratory and MAT 161 Pre-calculus

‡EET 181 Installation and Maintenance of Electrical Motors (2)

Theory, operation and application of electrical machines and control systems as related to industry. Installation, maintenance and troubleshooting of electrical motors and control systems emphasized.
1 Class Hour, 2 Laboratory Hours

‡EET 183 Applied Electricity (3)

Practical applications of electrical circuits and machines. Topics include AC and DC circuits, machines and controllers, and single- and three-phase circuits and transformers. Laboratory work includes demonstration of basic electrical concepts using measuring instruments such as digital multimeters, oscilloscopes, function generators, counters, wattmeters and bridges.
2 Class Hours, 3 Laboratory Hours; Prerequisite or Corequisite: MAT 139 and MAT 140 or equivalent.

‡EET 186 Electronics (3)

Practical applications of electronic concepts as applied to solid state devices, amplifiers, power supplies, oscillators, timers, flip flops and basic logic devices and microprocessors. Laboratory work includes practical applications of concepts by students, operation of common electronic instruments such as oscilloscope, curve tracer, function generator and counter.
2 Class Hours, 3 Laboratory Hours; Prerequisite: EET 183 Applied Electricity

EET 201/202 Senior Seminar (0, 0)

A weekly lecture series intended to make the student aware of the changing elements of the Electrical, Electronic and Computer industry and help the student focus on areas of concern presented by industry experts. Where appropriate, emphasis will be placed on the responsibility by technologists to society as a whole in the area of ethical and moral values. Topics may include Quality Assurance, Ethics in Engineering, Artificial Intelligence, Telecommunications, Robotics, Engineering, Modeling and Simulation, CIM, Interpersonal Communications, Statistics.
1 Class Hour; Prerequisites: ENG 110 Written Expression and MAT 161 Pre-calculus

EET 230 Electronic Design and Fabrication (1)

Selection, package design and construction of an electronic project and preparation of related drawings using computer aided design. Use of various manufacturing processes to fabricate the project. Use of industrial standard drafting practices to properly describe the operations. Chassis layout, printed circuit board design, exposure, and machining, wiring, soldering and enclosure fabrication are required.
3 Laboratory Hours; Prerequisites: EET 112 Electrical Construction Laboratory II and EET 130 Engineering Drawing and EET 251 Electronic Circuitry & Laboratory

*‡EET 235 Electrical and Electronics Drawing (2)

Graphic representation of circuitry related to the electrical and electronics fields. Use of industrial standards and symbolism to draw electronic, schematic and wiring diagrams, printed circuit layout and electronics assemblies. Construction of one-line power distribution diagrams, industrial motor control diagrams and commercial lighting layout.
1 Class Hour, 2 Laboratory Hours; Prerequisites: MET 113 Engineering Drawing and EET 255 Electronics I

*‡EET 245 Energy Conversions and Control Systems (4)

DC and AC electrical machines theory, applications, and control. Single-phase and polyphase power transformers and rectifiers. Application of industrial control systems.
3 Class Hours, 2 Laboratory Hours; Prerequisite: EET 126 Circuits II

†EET 247W Energy Conversions & Laboratory Elective (3, 1)

Theory, operation and application of DC and AC motors, generators and their control. Theory and application of single and polyphase transformers, power generation systems, and power transmission. Programmable controller applications. Writing Emphasis Course.
3 Class Hours, 3 Laboratory Hours (choose 1 of 3 electives); Prerequisite: EET 150 Electronic Devices & Laboratory

- All asterisked (*) courses are taught evenings only and when enrollment permits.
- All (†) courses carry separate grades for lecture and laboratory.
- All (‡) courses are combined lecture-laboratory courses and final grade depends on successful completion of both parts.

EET 247-L01 Power Systems Laboratory (1)

The Power Systems Laboratory places a major emphasis on three-phase power systems, alternator regulation, parallel operation of alternators, power factor correction and computer simulations for controlling an electrical power grid. A minor emphasis is placed on motor starters and programmable controllers.
3 Laboratory Hours; Prerequisite: EET 150 Electronic Devices & Laboratory

EET 247-L02 Programmable Controllers Laboratory (1)

The Programmable Controllers Laboratory places a major emphasis on motor starters and controllers, programmable controller (PLC) hardware and software, interfacing programmable controllers to the motor-generator stations, PLC variable speed control of induction motors and PLC data communications through a local area network. A minor emphasis is placed on power systems.
3 Laboratory Hours; Prerequisite: EET 150 Electronic Devices & Laboratory

EET 247-L03 Energy Conversions Laboratory (1)

The Energy Conversions Laboratory places an equal emphasis on power systems and programmable controllers.
3 Laboratory Hours; Prerequisite: EET 150 Electronic Devices & Laboratory

†EET 251 Electronic Circuitry and Laboratory (3, 1)

A second course in Electronics including semiconductor physics that incorporates the devices introduced in EET 150 Electronic Devices into representative circuits of moderate complexity. These include multi-stage tuned amplifiers, instrument and transducer amplifiers, op-amp active filters and other related data acquisition circuits. Practical considerations including heat sinking, noise, frequency effects and appropriate device selection. FORTRAN computer language is required for application software used to design and analyze multi-stage and active filter circuits.
3 Class Hours, 3 Laboratory Hours; Prerequisite: EET 150 Electronic Devices and Laboratory

†EET 252 Electronic Systems & Laboratory (3, 1)

A third course in Electronics that uses the circuit concepts used in EET 251 Electronic Circuitry to develop larger systems currently used in the electronics field. These include transducers, interface and data acquisition systems, switchmode power supplies, telecommunications, phase locked loops, television and communication systems, large signal amplifiers, sinusoidal oscillators and multivibrators. Emphasis is placed on interface between the analog and digital world. The computer used to aid in design and debug of systems.
3 Class Hours, 3 Laboratory Hours; Prerequisite: EET 251 Electronic Circuitry & Laboratory

*‡EET 255 Electronics I (4)

A first course in Electronics introducing the devices fundamental to the field. Introduction of semiconductor diodes, bipolar and field effect transistors, thyristors, op-amps. Design and analyze representative circuits based on these building blocks.
3 Class Hours, 2 Laboratory Hours; Prerequisite: EET 126 Circuits II

*‡EET 256 Electronics II (4)

A second course in Electronics that incorporates the devices introduced in EET 255 Electronics I into representative circuits of moderate complexity. These include multi-stage tuned amplifiers, op-amp active filters, and other related data acquisition circuits. Practical considerations including heat sinking, noise, electromagnetic interference, and appropriate device selection. Competency in FORTRAN is required to generate software for design and analysis of related circuits.
3 Class Hours, 2 Laboratory Hours; Prerequisites: EET 255 Electronics I and CST 122 Scientific Computer Programming - FORTRAN

*‡EET 257 Electronics III (4)

A third course in Electronics that uses the circuit concepts used in EET 256 Electronics II to develop larger systems currently used in the electronics field. These include switchmode power supplies, phase locked loops, communication systems, and interfacing systems. Computer used to aid in design and debug of systems.
3 Class Hours, 2 Laboratory Hours; Prerequisite: EET 256 Electronics II

†EET 267 Digital Electronics and Microprocessors I & Laboratory (3, 1)

Study of number systems, logic gates (TTL/CMOS), counters, shift registers, codes, types of memories, Boolean algebra, reduction theorems, and black box design applied to data transmission, computer arithmetic, and microprocessor operations. Microprocessor (8085 and 68000) assembly language programming using assemblers, disassemblers, monitors, loaders, logic analyzers and other tools related to industrial applications of microcomputers. Internal operation of a computer from a block diagram approach. Applications include software scrolling, IC testing, traffic controllers, display systems, and math operations. Appropriate laboratory exercises provide hands-on experience in three areas — digital circuitry, microprocessor assembly language, and microprocessor interface hardware.
3 Class Hours, 2 Laboratory Hours; Prerequisite: EET 150 Electronic Devices and Laboratory or EET 255 Electronics I and CST 122 Scientific Computer Programming-FORTRAN or CST 141 FORTRAN Programming with Graphic Applications

*‡EET 268 Digital Electronics and Microprocessors II & Laboratory (4)

Use of modern microprocessors (Z80, 8086 and 68000) in real time control applications such as testing complex circuitry using microcomputers, display systems, speech synthesis, EPROM and EEPROM programming, ultrasonic techniques, data manipulation, multiplexing, video games, satellite receivers, encryption techniques, disk controllers, array processors, and other modern topics in the microcomputer world. Use of development systems (UNIX based), logic analyzers, and high level languages. Students undertake a project related to the field and study the differences between eight other popular microprocessors. Assembly language skills learned in EET 267 Digital Electronics and Microprocessors I are tuned and further software development takes place.
3 Class Hours, 2 Laboratory Hours; Prerequisite: EET 267 Digital Electronics and Microprocessors I and Laboratory and instructor approval

†EET 270 Control Systems & Laboratory (3, 1)

Theory, operation, design and implementation of open and closed loop control systems, including mathematical modeling and stability prediction. Theory and applications of both analog and digital control system input/output. Introduction to robotics and process control techniques.
3 Class Hours, 3 Laboratory Hours; Prerequisites: EET 247 Energy Conversions & Laboratory and EET 267 Digital Electronics and Microprocessors I & Laboratory

EET 271 Communication Techniques (1)

The study of different forms of electronic communications, including microwaves, satellites, fiber optics and digital communication techniques. Examination of microwave devices, satellite receiver systems and signals, pulse modulation techniques, time and frequency division multiplexing, modems, fiber optic components and local area networks.
3 Laboratory Hours; Prerequisite: EET 251 Electronic Circuitry & Laboratory; Corequisite: EET 252 Electronic Systems & Laboratory

†EET 272 Microcontroller Fundamentals & Laboratory (3, 1)

Theory of open loop and closed loop control systems, including responses, stability and mathematical modeling. Theory and application of the 8051 Microcontroller Family hardware and software, including programming timers, interrupts, serial communications and multi-tasking operations. Digital motion control systems and robotic applications.
3 ClassHours, 3 Laboratory Hours; Prerequisites: EET 247 Energy Conversions & Laboratory and EET 267 Digital Electronics and Microprocessors I & Laboratory

EET 273 Computer Design Lab (1)

Detailed coverage of Personal Computer hardware with emphasis on memory and I/O interfacing and operation, interrupts and DOS function calls. Theory of operation of floppy and hard disks. Use of the 8088 macro-assembler, linker and debugger to develop control software for the Personal Computer. Hardware and software applications, including memory-mapped video, serial and parallel data communication and 8087 coprocessor utilization. Detailed coverage of MS-DOS and C.
3 Laboratory Hours; Prerequisite: EET 267 Digital Electronics and Microprocessors I & Laboratory

†EET 274 Robotic Applications & Laboratory (3, 1)

Robotic systems, applications and safety. Industrial robot programming. Robot sensors, actuators and intelligence. Factory automation and computer integrated manufacturing. Theory of open loop and closed loop motion control systems, including responses, stability and mathematical modeling.
3 Class Hours, 3 Laboratory Hours; Prerequisites: EET 247 Energy Conversions & Laboratory and EET 267 Digital Electronics and Microprocessors I & Laboratory

EET 275 Machine Vision Lab (1)

Detailed coverage of video image digitization, processing and enhancement. Utilization of the Frame-grabber for capture, display and analysis of video images. Use of lo- and high-pass filtering, histogram equalization and false-coloring for image enhancement. Study of the effect of pixel size and z-axis resolution on image quality. Theory and implementation of machine vision applications, including recognition of small parts, positioning and inspection.
3 Laboratory Hours; Prerequisite: EET 267 Digital Electronics and Microprocessors I & Laboratory

- All asterisked (*) courses are taught evenings only and when enrollment permits.
- All (†) courses carry separate grades for lecture and laboratory.
- All (‡) courses are combined lecture-laboratory courses and final grade depends on successful completion of both parts.

EET 299 Independent Study (2-4)

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving a job-related assignment. Any independent study project is based on instructor availability.

Prerequisite: Department approval

EGR 100, 200 Orientation (0)

Attendance at these sessions assures the Engineering Science student a smooth transition into and out of Broome Community College. Guest speakers discuss common problems engineering students encounter. Representatives from transfer schools introduce their respective institutions to students. Common exams will be scheduled during these sessions.

2 Class Hours

EGR 150 Introduction to Engineering and Design Graphics (2)

Fundamental course in descriptive geometry and personal computer usage. Topics include hand graphing, orthographic and auxiliary views, true-length, and relationships between points, lines and planes. Students will be expected to gain a facility with word processing, spreadsheet use and computer graphics (using CADKEY). Use of spreadsheets to solve engineering applications in statistics, least squares regression, correlation coeffecient and nomograms. Weekly seminars on topics related to the Engineering profession.

1 Class Hour, 3 Laboratory Hours; Corequisite: EGR 100 Orientation and MAT 140 Trigonometry or MAT 161 Pre-calculus

EGR 151 Applications in Engineering (3)

Applications of computers to the solution of engineering problems. Programming in Pascal and FORTRAN and use of spreadsheets will be used to solve problems in financial functions, heat transfer, statistics, numerical methods and data analysis. Matrix methods and quality assurance applications will also be covered. Hardware use will include both a VAX mainframe and a personal computer.

2 Class Hours, 2 Laboratory Hours; Prerequisite: EGR 150 Engineering Graphics; Corequisite: EGR 100 Orientation and MAT 181 Calculus I with Analytic Geometry

EGR 281 Mechanics (Statics) (3)

Fundamental concepts of the statics of rigid bodies developed by using a vector analysis approach. Force systems, centroids and centers of gravity, analysis of structures, shear and bending moments, friction and moments of inertia.

3 Class Hours; Prerequisite: 1 year of Calculus and PHY 181 Physics I; Corequisite: EGR 200 Orientation

EGR 282 Mechanics (Dynamics) (3)

Concepts using vector analysis approach to kinematics and kinetics of particles, systems of particles, kinematics and kinetics of rigid bodies, forces, mass, acceleration, impulse, momentum, work and e techniques.

3 Class Hours; Prerequisite: EGR 281 Mechanics (Statics); Corequisite: EGR 200 Orientation

EGR 283 Strength of Materials (3)

Elementary analysis of the strength and deformation of deformable bodies. Topics included are stress-strain, torsion, bending, Mohr's circle, flexure, energy methods, and columns.

3 Class Hours; Prerequisite: EGR 281 Mechanics (Statics); Corequisite: EGR 200 Orientation

EGR 284 Materials Science (3)

Atomic model, bonding, lattice concept, crystal types, imperfections, stress and temperature effects, phase diagrams, alloys, ceramics, polymers, composites, corrosion, electrical and magnetic properties materials

3 Class Hours; Prerequisite: PHY 182 Engineering Physics II and CHM 146 Chemistry

EGR 285 Electrical and Electronic Circuits (3)

Units and definitions; charge, current, voltage, power, energy. Ohm's Law, active and passive elements, independent and dependent sources. Resistance, Kirchhoff's Laws, network reduction. Nodal and mesh analysis techniques, source transformation, superposition. Thevenin's and Norton's theorems, maximum power transfer. Capacitance and inductance; natural, forced, and complete response of switched R-L, R-C, and R-L-C circuits. A.C. sinusoidal steady state analysis. Ideal and practical operational amplifier circuits. Frequency response of parallel and series R-L-C circuits and filter networks. Computer aided circuit analysis using PSPICE.

3 Class Hours; Prerequisite: 1 year of Calculus and PHY 182 Engineering Physics II; Corequisite: EGR 200 Orientation

EGR 287 Engineering Science Laboratory I (1)

Experiments in electrical and electronic circuits, heat, light, atomic and nuclear physics. Program writing in BASIC to control instruments on a GPIB using IEEE-488 standard.

3 Laboratory Hours; Prerequisite: 1 year of Calculus and PHY 182 Engineering Physics II; Corequisite: EGR 285 Electrical and Electronic Circuits and PHY 281 Engineering Physics III

EGR 288 Engineering Science Laboratory II (1)

Experimentation in digital logic and microprocessors, software and hardware interfacing.

3 Laboratory Hours Prerequisite: EGR 287 Engineering Science Laboratory I; Corequisite: EGR 289 Introduction to Microprocessors

EGR 289 Introduction to Microprocessors (2)

Introduction to microprocessors with digital logic, machine and assembly language programming, serial and parallel Input/Output, hardware interfacing with switches, lights, printers, and other computes.

2 Laboratory Hours; Prerequisite: EGR 287 Engineering Lab I and EGR 285 Electrical Circuits; Corequisite: EGR 288 Engineering Science Laboratory II and EGR 200 Orientation

EGR 299 Independent Project (2-4)

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving work assignment.

Prerequisite: Department approval

ENG 090 Basic Language Skills (0)

Writing workshops designed to improve a student's mastery of composition skills, including patterns of sentence structure and the recognition and correction of common errors in grammar and usage. (This course not applicable to any degree.)

4 Class Hours; Prerequisite: Placement Test

ENG 106 English as a Second Language, Intermediate II (3)

Advanced study of the English language for international students. Emphasis on the development of basic English compositional skills. Continued practice in listening, reading, and speaking.

3 Class Hours; Prerequisite: ESL 113 English as a Second Language, Series or equivalent

ENG 107 English as a Second Language, Advanced I (3)

Expanded study and practice in the composition of ideas and information for international students. Sentence and paragraph development, unity, coherence, style. Writing workshops for intensive practice in the formation of standard and idiomatic English. Investigation of the nature of language and various aspects of communication to stimulate critical thinking.

3 Class Hours (Equivalent to ENG 110 for foreign students); Prerequisite: ENG 106 English as a Second Language, Intermediate II or equivalent

ENG 108 English as a Second Language, Advanced II (3)

Further study and practice in critical and evaluative thinking and writing for international students, based upon analysis and exposure to prose as well as major types of imaginative literature. Additional practice and familiarization with research procedures. Writing workshops and individual conferences to guide the international student through writing assignments.

3 Class Hours; Prerequisite: ENG 107 English as a Second Language, Advanced I

ENG 110 Written Expression (3)

Study and practice in the composition of ideas and information. Sentence and paragraph development, unity, coherence, style. Nature of language, including investigation of various aspects of communication to stimulate critical thinking.

3 Class Hours; Prerequisite: Placement test or ENG 090 Basic Language Skills

ENG 110S Written Expression (3)

Same as ENG 110 Written Expression with one additional hour of supplemental help.

4 Class Hours; Prerequisite: Placement Test or ENG 090 Basic Language Skills

ENG 150 Technical Writing (3)

Principles and practice of writing in a technical environment. Emphasis on analysis and preparation of reports, articles, and technical correspondence. (This course is for students in Engineering Technology Programs.)

3 Class Hours; Prerequisite: ENG 110 or 110S Written Expression

ENG 163 Reporting (3)

An introduction to the basics of News Reporting for print journalism. Student newspaper used for workshop and actual publication.

3 Class Hours; Prerequisite: ENG 110 or 110S Written Expression

ENG 163L Journalism Laboratory: Fulcrum (1)

Reporting, writing and editing the Fulcrum, the campus newspaper. Designed for editor and staff members of the Fulcrum.

3 Laboratory Hours (may be repeated for credit)

ENG 168 News Editing (3)

The basics of editing, headline writing, layout, and design for print journalism. Student publication used for hands-on experience.

3 Class Hours; Prerequisite: ENG 163 Reporting or ENG 110 or ENG 110S Written Expression plus permission of instructor

ENG 170 Creative Writing (3)

Designed to provide students interested in imaginative writing with the opportunity to investigate concepts and to practice techniques implicit in prose, poetry and drama. Class discussion, workshops and personal conferences with the instructor.

3 Class Hours; Prerequisite: ENG 110 or 110S Written Expression

ENG 175 Creative Writing – Publication (4)

Designed to provide students interested in imaginative writing with the opportunity to investigate concepts and to practice techniques implicit in prose,poetry, and drama. Class discussion, workshops and personal conferences with the instructor, writing, evaluating and arranging material for a campus literary journal.
4 Class Hours; Prerequisite: ENG 110 or 110S Written Expression

ENG 210 Advanced Writing (3)

An intensive course in writing which extends the composing and critiquing skills of students who have mastered the basic skills of written expression. Emphasis on experimental techniques such as workshopping, peer tutoring, and word processing. Provides students with experience in collaborative techniques for improving their own writing and with techniques for tutoring beginning writers. Course requires peer tutoring in The Writing Center.
3 Class Hours; Prerequisite: English 110 or 110S Written Expression

ENG 220 Communicating About Values (3)

Critical analysis of issues and moral problems affecting all thinking adults. Selected readings organized around broad themes. Required writing assignments and oral communication. Required of most degree students.
3 Class Hours; Prerequisite: ENG 110 or ENG 110S Written Expression and completion of at least one but preferably two Writing Emphasis ("W") courses.

ENG 299 Independent Study: English (3)

An individual student project concerned with advanced work in a specific area of language or literature. Conducted under the direction of a faculty, independent study is concerned with material beyond the scope and depth of the ordinary course.
Prerequisite: One semester of college level work including ENG 110 or 110S Written Expression

ESL 003 English as a Second Language, Elementary Grammar (4)

Introduction of basic English grammar, both oral and written, for non-native speakers. Curriculum will include study of basic verb tenses, noun categories, and basic affirmative, negative, and interrogative sentence patterns. The material will reinforce what is taught in ESL 004 and 005. Taken together these courses are referred to as the ESL 003 Series. (This course is not acceptable for credits toward a degree.)
4 Class Hours, 2 Laboratory Hours; Prerequisite: Diagnostic Test

ESL 004 English as a Second Language, Elementary Oral/Aural Skills (4)

A course for students who speak little or no English. The sounds of English are presented systematically and language laboratory practice is required. Ear training is begun and strengthened through work in the listening laboratory. Students are taught communicative skills from the outset, and the emphasis is on speaking and being understood. (This course is not acceptable for credits toward a degree.)
4 Class Hours, 2 Laboratory Hours; Prerequisite: Diagnostic Test

ESL 005 English as a Second Language, Elementary Reading Skills (4)

For non-natives who had little exposure to written English. Basic sentence structure and vocabulary will be studied in order to improve student's comprehension, from simplified reading texts to those of increasing complexity. Writing skills, simple sentence structures, and organization skills are also stressed. (This course is not acceptable for credits toward a degree.)
4 Class Hours, 2 Laboratory Hours; Prerequisite: Diagnostic Test

ESL 102 English as a Second Language, Basic Writing Skills (5)

Introduction to the basic rhetorical/sentence patterns of English and their usage, organizational and developmental writing skills. Focus on the expression of ideas/concepts and their presentation in simple and complex sentence form, proofreading and editing skills, note taking, outlining and computer assisted instruction. (This course is not acceptable for credits toward a degree.)
4 Class Hours, 3 Laboratory Hours; Prerequisite: Diagnostic Test

ESL 103 English as a Second Language, Grammar Review (5)

Intensive review of pre-intermediate levels of the English language for international students. Emphasis on listening, reading, speaking and some aspects of writing. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
4 Class Hours, 2 Laboratory Hours

ESL 104 English as a Second Language, Basic Speech (4)

To provide international students with practice, articulation and vocabulary needed to increase self-confidence in English conversation, discussion in the classroom and other daily situations. Audio-lingual laboratory. (This course is not acceptable toward a degree.)
3 Class Hours, 2 Laboratory Hours

ESL 105 English as a Second Language, Basic Reading (4)

Review of English sound-symbol correspondence, utilization of brief recombinations of variations of narratives and dialogues, and acquisition of simple reading techniques through exposure to uncomplicated reading selections. Vocabulary and reading comprehensive development, audio-lingual practice — active, passive, comparative. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
3 Class Hours, 2 Laboratory Hours

ESL 113 English as a Second Language,Intermediate Composition (4)

Study of the English language for international students with listening, reading, speaking, writing skills on the intermediate level. Language workshops emphasizing grammar, syntax, vocabulary and composition. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
3 Class Hours, 2 Laboratory Hours; Prerequisite: ESL 103 English as a Second Language, Grammar Review or equivalent

ESL 114 English as a Second Language, Intermediate Speech (4)

Designed for international students emphasizing free and controlled conversation and discussion. Continues practice in articulation, phrasing and vocabulary building. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
3 Class Hours, 2 Laboratory Hours; Prerequisites: ESL 104 English as a Second Language, Basic Speech or equivalent

ESL 115 English as a Second Language, Intermediate Reading (4)

Study of lexical, grammatical, and social-cultural meaning through intensive and extensive reading. Establishment of reading fluency and comprehension. Direct and audio-lingual practice with selected text and independence in English. Continues development of vocabulary and reading comprehension. Direct and audio-lingual practice with selected texts and exercises. Audio-lingual laboratory. (This course is not acceptable for credits toward a degree.)
3 Class Hours, 2 Laboratory Hours; Prerequisite: ESL 105 English as a Second Language, Basic Speech or equivalent

FRE 101, 102 Beginning French (4, 4)

Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Reading and discussion of graded literary and cultural texts.
4 Class Hours, 1 Laboratory Hour; Prerequisite: FRE 101 Beginning French for FRE 102

FRE 201, 202 Intermediate French I and French II (3)

Intensive review of grammar and syntax and oral practice in classroom. Reading and discussion of works selected by the instructor.
3 Class Hours, 1 Laboratory Hour; Prerequisite: FRE 102 Beginning French for FRE 201

*FRS 101 Fire Prevention and Protection (3)

Methods, policies and procedures relative to establishing and operating appropriate fire prevention and protection programs. Writing Emphasis Course.
3 Class Hours

*FRS 103 Fire Fighting Tactics and Strategy (3)

Focus on pre-planning and the development of fire fighting tactics appropriate for a wide variety of hazards. Review of basic information and some local conditions. The case study method is used to develop plans and tactics relating to the student's own department.
3 Class Hours

*FRS 105 Arson Investigation (3)

Fire investigations and arson. Responsibilities of the arson investigator, tools of the investigator, photography, electronic devices, laws pertaining to arson, motives and tools of the arsonist, courtroom procedures. A field experience will be included.
3 Class Hours

*FRS 107 Legal Aspects of the Fire Service (3)

Laws and regulations as they pertain to the fire service and its personnel. Legal terminology necessary for the interpretation of pertinent laws and decisions. Legal status of the fire fighter, as well as fire fighter's rights, duties and liabilities. Responsibilities and powers of the service in enforcement of ordinances and codes.
3 Class Hours

*FRS 108 Building Construction for Fire Science (3)

Fire fighters are confronted with many unknown factors at the fire ground. Among these is the unknown structural stability of the buildings they must enter. Basic principles of building construction and design with emphasis focused on fire protection concerns. Building materials included.
3 Class Hours

•All asterisked (*) courses are taught evenings only and when enrollment permits.

FRS 110 Computers in the Fire Service (3)

Introductory concepts of micro-computer use in Fire Science settings. Software packages, hardware and software purchasing relating to Fire Service usage, word processing, data base management and spreadsheet application to student generated problems.
3 Class Hours

*FRS 200 Hazardous Materials (3)

Chemicals and chemical processes most closely involved in fire protection and fire fighting. Use, storage, transportation and disposal of hazardous materials with emphasis on flammable liquids, flammable solids, oxidizing materials, corrosive liquids, compressed gases.
3 Class Hours

*FRS 201 Fire Service Hydraulics (3)

Application of the laws of mathematics and physics to properties of fluid states, force pressure and flow velocities. Emphasis on applying principles of hydraulics to fire fighting problems.
3 Class Hours; Prerequisite: MAT 092 or equivalent

FRS 204 Protection and Suppression Systems (3)

Design, installation, operation, and trouble shooting of various systems. Extinguishers, alarms, sprinkler systems, chemical approaches, and Halon systems. Projects and field trip included.
3 Class Hours

*FRS 205 Fire Department Administration (3)

Organization of the fire departments with emphasis on personnel management, distribution of equipment, maintenance of records, communications, data collection and community relations. ISO Grading Schedule.
3 Class Hours

FRS 213 Advanced Tactics and Strategy (3)

Methods and operational procedures of fire fighting from a management and direction perspective. How conditions and situations affect tactics, miscellaneous special problems; ventilation, and post-fire analysis and evaluation.
3 Class Hours

FRS 215 Codes and Enforcement (3)

An introductory course in building codes and enforcement procedures. Topics include classifications, inspections, handicap requirements, fire and safety equipment, public relations, laws and regulations, municipal requirements. Students will do projects, planned reviews given certain scenarios.
3 Class Hours

*FRS 250 Special Topics (1-3)

Exploration of special topics in Fire Protection Technology. May be repeated since topics will vary from semester to semester. Special topics have included The Psychology of the Firesetter and Code Enforcement.

*FRS 299 Independent Study: Fire Service (1-3)

An individual student project in an area of fire protection or service beyond the scope of regular coursework. Conducted under supervision of coordinator and approved by department chairperson.
Prerequisite: 6 Credits in FRS coursework and 6 Credits in General Education courses

GEO 120 World Geography (3)

Description and analysis of variations in social, cultural, economic and political phenomena in major world areas. A regional approach is used to highlight the phenomena.
3 Class Hours

GER 100 Practical German: 10 Minutes a Day (2)

Practical and simplified approach to speaking and understanding German. Emphasis on important and necessary aspects of everyday communication. Vocabulary and pronunciation acquisition through use of instructor's expertise, flash cards, stickers, illustration, and sign recognition. (Does not satisfy language requirement.)
2 Class Hours

GER 101, 102 Beginning German (4, 4)

Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Written homework assignments supplemented by work in audio-lingual laboratory. Reading and discussion of graded literary and cultural texts.
4 Class Hours, 1 Laboratory Hour; Prerequisite: GER 101 Beginning German for GER 102

GER 201 German Conversation and Composition (3)

Emphasis on the four language skills – reading, writing, speaking, listening – especially on speaking and writing. Intensive discussion of style, grammar and the contemporary idiom to enhance the student's ability to express himself in German.
3 Class Hours, 1 Laboratory Hour; Prerequisite: GER 102 Beginning German

HIS 101-H Making of the Modern World I (3)

The evolution of modern societies and cultures from app. 1500 to 1914. Development of Western Civilization as compared to selected non-Western societies. Early modern periods; Renaissance, Reformation, evolution of national government, scientific and technological revolutions, the Enlightenment. Great discoveries, colonial empires, beginnings of global civilization. Age of Revolution: American and French revolutions, industrialization, modern political ideas, development of modern culture. Imperialism, further development of global civilization. (For honors students only; substitutes for HIS 115. Students cannot receive credit for HIS 101-H and HIS 115)
3 Class Hours

HIS 102-H Making of the Modern World II (3)

A survey of the world in the 20th century, continuing the themes developed in Making of the Modern World I. Origins and consequences of the World War I. The Russian Revolution and the development of the USSR under Lenin and Stalin. The rise of fascist movements. Origins and consequences of World War II. The Cold War. Selected topics in post-1945 history. Evolution of modern culture: science, views of man and society, art, literature, music, film. (For honors students)
3 Class Hours

HIS 115 Modern Global History: The World in Transition (3)

HIS 115 Modern Global History is a core course required of all Liberal Arts students.
Historical Development of Western Civilization in the 19th-20th centuries, contrasted with selected non-Western societies. the key theme — the effects of modernity — is examined in several aspects: the regional nature of geography and demography; the important influences of traditional values and religious beliefs in the areas selected for study; the evolution of capitalism, socialism and communism, and nationalism and how these concepts affected less developed countries; the impact of industrialization, colonialism, technology and science on the peoples of the contemporary world.
3 Class Hours

HIS 130 United States History I (3)

The United States from 1607 to 1898. The colonies, Revolution, Constitution, early national period, Age of Jackson, expansion, Civil War and Reconstruction, the West and the Gilded Age. Survey of political, economic, cultural developments through the 19th century.
3 Class Hours

HIS 131 United States History II (3)

The United States from 1898 to the present. the American Empire, progressive reforms, World War I, the Twenties, Depression, New Deal, World War II and the Cold War, post-domestic issues.
3 Class Hours

HIS 141 History of Modern Latin America (3)

History of Latin America from the 1890's to the present, emphasizing the causes of political instability and economic backwardness. Close analyses of reform, reactionary and revolutionary movements in modern Latin America and of inter-American affairs.
3 Class Hours

HIS 170 The Future as History: A Look at the 21st Century United States (3)

Does the future have to be a shock? The objective of this course is to prove it does not have to be. Three or four possible courses which the next 100 years may take will be plotted, using knowledge of the economic, political and social developments of the past 100 years of U.S. history and a basic understanding of the present day situation.
3 Class Hours; Prerequisite: HIS 130 United States History I or HIS 131 United States History II or POS 201 Introduction to American Government

HIS 175 Local History (3)

The early history of our local area including the late 18th century Indian communities and the growth of the 19th century white settlements through development of industries and institutions from the days of the frontiersmen to the era of the railroaders and the factory hands. Historical methods of research. An historical walking tour of Binghamton, investigation of historical records on the premises of cooperative local institutions, and observation of contributions to local history.
3 Class Hours

HIS 180 Utopia: Visions of the Good Society (3)

Examines the functions of the Utopian Impulse throughout modern history as a series of "thought experiments" which address the question "what constitutes the Good Society?" Includes a comparative analysis of various representative utopias such as those of T. More, E. Ballamy, We. Morris, C.P. Gilman, H.G. Wells, B.F. Skinner, etc. Consideration will also be given to several representative anti-utopias/dystopias such as those of A.X. Huxley, G. Orwell, etc.
3 Class Hours

HIS 183 Herstory: Woman as a Historical Force (3)

A look at various ideologies about women compared to reality: varying attitudes toward women and where they originated; resulting roles assigned and contribution made by women in western civilization, with emphasis on the United States.
3 Class Hours

•All asterisked (*) courses are taught evenings only and when enrollment permits.

HIS 185 Hitler and the Nazi Dictatorship (3)

Origins of National Socialism, role of Adolf Hitler, road to Nazi Dictatorship, Nazi political and social revolutions. Hitler's foreign policy and Europe's reaction, World War II and Hitler's "New Order," Nazi system of persecution and genocide, collapse of the 1,000-year Reich, legacy of the Hitler period.
3 Class Hours

HIS 186 Modern American Social History (3)

Historical currents of social change and reform in the 20th century. Reformist themes bearing on health, welfare, labor, womens' suffrage, civil rights movement, and recent challenges to traditional American family structures and values, against the backdrop of hostile and supportive private groups. Creation of public institutions to meet human needs, such as Social Security. Response of the courts to organized reformist pressures. Contemporary trends.
3 Class Hours

HIS 187 The United States Civil War: Causes and Effects (3)

A study of American institutions within the timeframe of 1815-1877; examination and analysis of Antebellum politics, society, and culture; origin and nature of the American Civil War and the social, economic and political changes brought about by the War and Reconstruction.
3 Class Hours

HIS 190 The World Since 1945 (3)

An overview of the changing patterns in world affairs since the end of World War II. Emergency of the Third World War, The Cold War, responses to scientific/technological change, insurgent movements, attempts at world organization/disarmament, the energy/ecology crisis, the various trouble spots like the Middle East, Panama Canal, Berlin, Asia.
3 Class Hours

HIS 194 Modern African-American History from Reconstruction to 1968 (3)

A survey of African-American thought, including the ideas of Booker T. Washington, W.E. DuBois, Marcus Garvey, Martin Luther King, Jr., and Malcolm X. In addition, attention will be given to the Harlem Renaissance, the Great Black Migration, the Civil Rights Movement and the Black Power Movement.
3 Class Hours

HIS 299 Independent Study (1-3)

An independent study project which is beyond the scope of courses currently offered by the department, directed by a faculty member with approval of the department chairperson. Independent study does not satisfy the Liberal Arts requirement in history, and it may not be taken in lieu of a 100-series course.
Prerequisite: HIS 100 The Rise of the West or HIS 115 Modern Global History

HSV 101 Cardiopulmonary Resuscitation (1)

Procedures necessary in administering CPR in emergency situations. American Heart Association method of teaching with certification. Performance of mastery level by demonstration and exam. Will be given in 2-hour sessions to make a total of 8 hours..

HUM 200 Joseph Campbell: Transformations of Myth Through Time (3)

A combined classroom and televiewing course. This course consists of 14 hour-long programs selected from over 50 lecture hours by Joseph Campbell, a noted author, scholar, teacher, and storyteller. The series is introduced by *The Hero's Journey*, an award-winning biographical film.

HUS 120 Basic Sign Communication I (3)

Introduction to conversationally relevant signs, fingerspelling, grammatical sign principles, and background, cultural, and linguistic information related to deaf people and sign language. The Direct Experience Method is used to help students learn to sign by experiencing the use of signs directly. Some emphasis is on non-manual communication (visual training, gestures and mime are used to help develop a comfort level for using face, hands and body for communication purposes). Approximately 400 signs are introduced.
3 class Hours

HUS 220 Basic Sign Communication II (3)

Review of Basic Sign I. Expressive and receptive fingerspelling as well as recall of vocabulary. Sign vocabulary is further organized around basic conversational topics and questions. Sign grammatical principles are expanded and practiced. Approximately 300 signs are introduced.
3 Class Hours; Prerequisite: HUS 120 Basic Sign Communication I

HUS 230 Basic Sign Communication III (3)

Additional and expanded topics for conversation are introduced with the associated vocabulary. Variations of signed messages by incorporating different sign principles and mime. More emphasis on conversational fluency in sign. The student will be able to generate increasingly more complex signing structures. Approximately 300 additional signs are introduced.
3 Class Hours; Prerequisite: HUS 220 Basic Sign Communication II

INT 105 Basic Drawing for Interior Design (3)

A course to provide design students drafting skills needed in the design of interiors.
1 Class Hour, 4 Laboratory Hours

INT 110 Interior Design I (4)

The studio interior design course requires the student to become well acquainted with the impact of the designed physical environment. Practical, aesthetic and psychological aspects of the built environment are addressed. Skills including conceptualizing in three dimensions, drawing in scale and presentation techniques both graphic and oral are developed. Historic aspects of design and influential architects, designers, journalists, and manufacturers will be investigated. Basic design elements will be applied to building design with emphasis on affordable residential design solutions.
2 Class Hours, 4 Studio Hours; Prerequisite: Introduction to Design; Recommended: INT 105 Basic Drawing for Interior Design and ART 101 History of Western Art

INT 111 Interior Design II (4)

To build and develop further the techniques acquired in Interior Design 110. Emphasis will be placed on conceptual analysis of space, aesthetic and functional. The student will be expected to work with the interior environment as a place that nurtures and sustains the human spirit. Sensitivity to the existing architecture of the building as well as awareness of the activities that must be accommodated will be stressed to develop a workable and convincing solution to each project, residential and commercial.
2 Class Hours, 4 Studio Hours; Prerequisite: INT 110 Interior Design I

INT 122 Professional Practice (3)

Study of processes, manufacture and installation of interior design products. Techniques used in writing specifications for interior design projects.
2 Class Hours, 2 Laboratory Hours

INT 141 History of Fabrics (2)

The history and development of fabric from preindustrial through 20th century production techniques with emphasis on stylistic qualities of weaves and patterns. The student will become familiar with appropriate patterns, weaves and fibers for specific historic periods.
2 Class Hours

INT 142 Fabric Anaylsis: Chemistry of Fibers and Construction of Fabrics (2)

The examination of the chemistry and behavior of natural and synthetic fibers and the various constructions of woven and non-woven fabrics.
2 Class Hours

INT 299 Independent Study: Interior Design (1, 3)

See ART 299

ITA 101, 102 Beginning Italian (4, 4)

Basic principles of grammar and syntax. Emphasis on oral practice in classroom. Reading and discussion of graded literary and cultural texts.
4 Class Hours, 1 Laboratory Hour; Prerequisite: ITA 101 Beginning Italian for ITA 102

ITA 201 Intermediate Italian I (3)

Comprehensive review of grammar and structure of the language. Intensive reading of literary works as a basis for topics of conversation in Italian in the classroom. Emphasis on aural comprehension and oral practice in classroom.
3 Class Hours, 1 Laboratory Hour; Prerequisite: ITA 102 Beginning Italian

ITA 202 Intermediate Italian II (3)

Intensive reading of literary works of recognized authors as a basis for topics of conversation in Italian in the classroom.
3 Class Hours, 1 Laboratory Hour; Prerequisite: ITA 201 Intermediate Italian I

ITA 299 Independent Study: Italian (1-3)

An individualized student project concerned with advanced work in specific area of Italian. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.
Prerequisite: 3 semester hours of college level work in Italian.

LIT 200 Introduction to Literature (3)

A survey of basic genres and themes in literature with introduction to literary analysis.
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 201 Studies in United States Literature I (3)

History and development of United States literature from colonial period to late 19th century. Emphasis on several major writers of the period.
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 211 Studies in United States Literature II (3)

History and development of United States literature from late 19th century to the present. Emphasis on several major writers of the period.
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 214 Studies in British Literature I (3)

History and development of British literature from the Middle Ages to the 18th century. Selections of literary merit from prose, drama, poetry
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 215 Studies in British Literature II (3)

History and development of British literature from the beginning of the 18th century to the middle of the 20th.
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 220 The World of the Short Story (3)

An examination of the development of American, British and Continental short stories. Emphasis on theme and structure.
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 230 American Drama (3)

Studies in dramatic theories, techniques and thematic problems of the American drama. (Students taking this course may also be interested in THR 101 Fine Arts: Introduction to Theatre and THR 111 Acting.)
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 233 World Drama (3)

Studies in dramatic theories, techniques and thematic relationships of the world drama. (Students taking this course may also be interested in THR 101 Fine Arts: Introduction to Theatre and THR 111 Acting.)
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 235 Tragic and Comic Vision of Shakespeare (3)

Shakespeare as both dramatist and poet. Emphasis on selected comedies, histories, tragedies.
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 240 The Poetic Experience: Sight and Sound (3)

An exploration of the different modes and moods of poetic expression. A thematic and structural approach to poetry as a total experience.
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 250 Women and Literature: Other Perspectives (3)

Students practice critical analysis and evaluation of literary works by and about women written in diverse socio-political contexts. Emphasis is placed upon the relationship between the text and its cultural setting and upon other, non-traditional critical perspectives, including feminist perspectives.
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 253 Psychological Investigation in Literature (3)

The application of Jungian, Freudian, and other psychological theories and insights to selected short stories, novels, and poems to promote more penetrating appreciation of character's motivations and actions and the literary work in general.
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 255 Modern Existential Literature (3)

An investigation of the themes of alienation and the absurd in selected prose and poetry to shed light on humanity's current existential crisis.
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 257 Heritage of Modern Literature (3)

An attempt to define modern literature as an embodiment and development of antique themes and traditions through the comparative study of the epic, the novel and related genre.
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 260 Detective Fiction (3)

A critical study of one of the most popular literary forms of our time, designed for armchair detectives. Starting with Poe, Conan Doyle (Sherlock Holmes) and other classics in the field, the course traces the development of the detective story from its puzzle-solving beginnings to the modern psychological novel of crime and detection.
3 Class Hours; Prerequisite: ENG 110 or 110S

LIT 263 Children's Literature (3)

Children's literature with introduction to the variety of books available today and development of standards for evaluating them. Prime concern is to help the student use the literature with children creatively, recognizing the importance of language arts, communication and listening skills in cognitive development.
3 Class Hours; Prerequisite:ENG 110 or 110S

LIT 268 Fantasy and the Anti-Story (3)

An overview of two popular literary types: fantasy and anti-story. History of these types, with focus mainly on 20th century development as the types have matured. Students read non-realistic fiction.
3 Class Hours; Prerequisite: LIT 200 Introduction to Literature or Instructor's Permission

LIT 270 20th Century American Working-Class Literature (3)

An examination of literature created by 20th Century American writers from working-class backgrounds. Emphasis on theme and structure in contemporary texts in several genres; some investigation of the works' socio-political contexts.
3 Class Hours; Prerequisite: ENG 110 or 110S

LRS 101 Study Management (1/2)

General principles of academic success, relationship of outside work and study, scheduling and organizing time, study and concentration. Students will construct a working study schedule.
3 Class Hours for 3 Weeks

LRS 102 Memory and Exams (1/2)

Theories of memory. Methods of review, strategies for taking essay and objective examinations.
3 Class Hours for 3 Weeks

LRS 103 Textbook Mastery (1/2)

Use of college textbooks as study aids, principles of effective text reading, text study systems. Extensive application of these principles in the student's own textbook.
3 Class Hours for 3 Weeks

LRS 104 Listening and Notetaking (1/2)

Examination of organizational patterns as they exist in oral communication. Exploration of systems on notetaking, and application of systems to student's own lectures and notes.
3 Class Hours for 3 Weeks

LRS 105 Learning Skills (2)

Principles and techniques of academic success. Focus will be on classroom skills such as text reading and notetaking skills. Time management and exam taking strategies also will be covered. All techniques will be directly applied in the students' content courses.
3 Class Hours for 12 Weeks; course starts at the beginning of the third week of the semester; Corequisite: Students should be enrolled in a credit-bearing course which includes a textbook

LRS 106 College Success (3)

A review of students' learning experiences and personal learning styles. Characteristics of the independent learner, goal setting and academic success. General principles and techniques of effective study, including time management, improvement of memory and concentration, efficient textbook reading, and strategies for taking class notes and exams.

LRS 110 The Research Paper (1)

Shaping the Paper: Development of a topic, location of appropriate resources and digestion of the material. Writing the Paper: Outlining effective composition and proper form. A hands-on approach in which students actually research a topic and compose a term paper.
2 Class Hours for 8 Weeks; Course starts at the beginning of the fifth week of semester

LRS 120 The Art of Thinking (1)

Logic as an art. Logical principles taught in imaginative ways to achieve understanding. Emphasis on the practice of reasoning. Fundamental logic rules are taught as tools to enable the students to gain experience and confidence in thinking about issues that are important to them.
2 Class Hours for 8 Weeks; Course starts at the beginning of the fourth week of the semester

LRS 130 Introduction to Microcomputers and Word Processing (2)

Introduction to all aspects of the microcomputer through lecture and practice. Students will master at least one word processing package, as well as gain familiarity with both a graphics and a spreadsheet package. This course is intended for students who have no prior knowledge of microcomputers.
3 Class Hours for 10 Weeks; Course starts at the beginning of the fifth week of the semester

LRS 150 Advanced Learning Skills (3)

An intensive course in the examination and exploration of the learning process. Students will synthesize their knowledge, understanding, and appreciation of the learning process to plan, implement and evaluate their own peer tutoring. Emphasis on workshopping and collaborative learning. Intended for tutors, Supplemental Instruction Leaders, and students considering a career in education.
3 Class Hours; Prerequisite: Department Chair Interview and Approval

MAT 090 Arithmetic and the Language of Algebra (0)

Arithmetic of whole numbers, fractions and decimals. Percent, measurement, metric units, ratio and proportion. Language of algebra, arithmetic of signed numbers, solving simple equations. Problem solving. Note: This course is designed to provide the skills necessary for students to successfully complete MAT 092, MAT 113, MAT 114.
4 Class Hours

MAT 092 Introduction to the Concepts of Algebra (0)

Addition, subtraction, multiplication, division and simplification of algebraic expressions. Graphing, solving linear equations and inequalities in two variables. Quadratic forms.
Note: This course is designed to provide the skills necessary for students to successfully complete courses numbered MAT 125 or lower. MAT 099 is the appropriate course if the student wishes to eventually take higher level Mathematics courses (e.g., MAT 139 Algebra)
4 Class Hours; Prerequisite: MAT 090 or equivalent

MAT 096 Metric Conversion and Dosages (0)

Common fractions and decimal fractions. Metric computations. Apothecary systems. Apothecary, metric and household conversions. Calculations of dosages. Designed to meet the mathematics proficiency required for clinical nursing course.
2 Class Hours; Prerequisite: MAT 092 or equivalent

MAT 099 Elementary Algebra (0)

Basic arithmetic operations — basic algebraic operations, linear equations, graphing, factoring, algebraic fractions, systems of linear equations, exponents and scientific notation, roots and radicals, quadratic equations, trigonometric functions and graphs, solving right triangles. Designed to prepare technical students to enter MAT 139 Algebra, PHY 100 Preparatory Physics and CHM 102 Preparatory Chemistry.
5 Class Hours; Prerequisite: MAT 090 or equivalent

MAT 113 Mathematics: A Liberal Art I (3)

An introduction to the variety and structural beauty of mathematics. Topics include: descriptive statistical measures and graphs, probability, combinatorics, Latin squares, set theory, normal distribution, informal and formal statistical inference, process control charts, group decision making involving achieving fairness, apportionment problems, voting schemes, and game theory. Computer applications will support some of the topics. For Liberal Arts students: recommended for Fine Arts or Humanities majors; not for Science majors.
Prerequisite: MAT 090 Arithmetic and the Language of Algebra or equivalent

MAT 114 Mathematics: A Liberal Art II (3)

An introduction to the variety, structural beauty and practical applications of mathematics. Topics include: networks, trees, solving scheduling problems, linear programming, scaling real objects, applications of geometric growth, congruent and similar triangles, the Golden ratio, conic sections, symmetry and transformations. For Liberal Arts students: recommended for Fine Arts or Humanities majors; not for Science majors.
Prerequisite: MAT 090 Arithmetic and the Language of Algebra or equivalent

MAT 117 Elementary Finite Mathematics with Algebra (4)

Sets, probability, matrix algebra, graphic, inequalities, linear programming, permutations and combinations, linear models of equilibrium, systems of linear equations, solving equations and inequalities. (Students may not use both MAT 145 and MAT 117 to meet graduation requirements.)
4 Class Hours; Prerequisite: MAT 092 Introduction to the Concepts of Algebra

MAT 119 Modern Basic Mathematics I (3)

Algebra of propositions. Algebra of sets. Systems of numeration other than base ten. Properties of the operations of addition and multiplication for the sets of whole numbers, integers and rational numbers. Introduction to number theory. For Liberal and General Studies Students; recommended for elementary education majors.
3 Class Hours; Prerequisite: MAT 092 Introduction to the Concepts of Algebra

MAT 120 Modern Basic Mathematics II (3)

Real number systems, other mathematical systems. Informal geometry, congruence, measurement of areas and volumes, basic constructions. Coordinate geometry, lines, circles, equations. Inequalities and linear programming. Simple and conditional probability. Introduction to statistics. (W course)
3 Class Hours; Prerequisite: MAT 119 Modern Basic Mathematics I or MAT 092 or equivalent

MAT 124 Statistics I (3)

Descriptive statistics, organization and presentation of data, measures of central tendency. Variance, standard deviation, binomial distribution, statistical inference. Random sampling, hypothesis testing, confidence intervals, normal distribution, analysis of variance. Chi-square distribution, student's t-distribution, correlation and regression. (Students may not use both MAT 124 and MAT 125 to meet graduation requirements.
3 Class Hours; Prerequisite: MAT 092 Introduction to the Concepts of Algebra, or MAT 099 Elementary Algebra or equivalent

MAT 125 Statistics I Using Computers (3)

Introducing the computer language MINITAB to analyze descriptive statistics, organization and presentation of data, measures of central tendency, standard deviation, binomial distribution, statistical inference, random sampling, hypothesis testing, confidence intervals, normal distribution, Chi-square distribution, student's t-distribution, correlation and regression, Levey-Jennings and Youden Plots. (Students may not use both MAT 124 and MAT 125 to meet graduation requirements.)
3 Class Hours; Prerequisite: MAT 092 Introduction to the Concepts of Algebra, or MAT 099 Elementary Algebra or equivalent

MAT 139 Algebra (4)

Real and complex numbers, algebraic operations, functions and graphs, exponents and logarithms, linear and quadratic equations, systems of linear equations, linear inequalities, the binomial theorem, matrices and determinants.
4 Class Hours; Prerequisite: MAT 099 Elementary Algebra or equivalent

MAT 140 Trigonometry (4)

Trigonometric functions and their graphs, solutions of triangles, trigonometry identities and equations, inverse trigonometric functions, position vectors, polar representation of complex numbers. DeMoivre's theorem.
4 Class Hours; Prerequisite: MAT 139 Algebra or equivalent

MAT 145 Finite Mathematics (3)

Boolean Logic, matrices, linear programming, simplex game theory, graphs, networks, application of networks and graphs. (Students may not use both MAT 145 and MAT 117 to meet graduation requirements.)
3 Class Hours; Prerequisite: MAT 139 Algebra or equivalent

MAT 146 Introduction to Calculus (3)

Analytic geometry of line, circle and parabola. Functions and their graphs. Limits and continuity, differential — rules and applications, integration techniques and applications. Exponential and logarithmic functions and applications. Recommended for business students. Not for math majors or science majors in the A.S. degree program.
3 Class Hours; Prerequisite: MAT 139 Algebra or equivalent
Note: Students may not use more than one of the following to meet graduation requirements: MAT 146, MAT 162, MAT 181

MAT 161 Pre-Calculus (4)

A review of algebra and trigonometry emphasizing computational skills. Algebraic operations, functions, graphs, exponents, logarithms, linear equations, inequalities, determinants, quadratic equations. Trigonometry, solutions of triangles, trigonometric graphs. complex numbers and vectors.
Prerequisite: Completion of a course in Algebra and Trigonometry or placement by advisor

MAT 162 Applied Calculus I (4)

Basic analytic geometry, distance, equations of lines. Limits, continuity and the derivative. Differentiation of polynomials, maxima and minima. Differentials and approximation, applications in kinematics and circuits. The definite integral and applications to finding area, center of gravity, volume of revolution work done. Approximate integration, differentiating products and quotients, implicit differentiation and related rates, differentiation and integration of logarithmic, exponential, trigonometric and inverse trigonometric functions.
4 Class Hours; Prerequisite: MAT 161 Pre-Calculus or equivalent
Note: Students may not use more than one of the following to meet graduation requirements: MAT 146, MAT 162, MAT 181

MAT 181 Calculus I with Analytic Geometry (4)

A university-parallel calculus course covering equations of lines, functions, limits and continuity. Differentiation of algebraic and trigonometric functions with applications including curve sketching, rectilinear motion, related rates, maxima and minima. Summation, integration and the fundamental theorem of calculus. Applications of the definite integral including area, volume, arc length, surface area and work.
4 Class Hours; Prerequisite: MAT 161 Pre-Calculus Mathematics or equivalent
Note: Students may not use more than one of the following to meet graduation requirements: MAT 146, MAT 162, MAT 181

MAT 182 Calculus II with Analytic Geometry (4)

Differentiation and integration of logarithmic, exponential, hyperbolic functions, inverse trigonometric, inverse hyperbolic functions and parametric expressions. Techniques of integration including integration by parts, partial fractions and trigonometric substitution. Improper integrals, indeterminate forms and L'Hopitals rule. Conic sections and rotation of axes. The Polar Coordinate System and its applications. Vectors in two and three dimensions. Unit tangents and normals. Lines and planes in three space. Dot and cross product.
Prerequisite: MAT 181 Calculus I with Analytic Geometry

MAT 224 Statistics II (3)

Review of probability fundamentals, discrete random variables and probability distributions. Continuous random variables and probability distributions, joint probability distributions and random samples, central limit theorem, point estimation, interval estimations, hypothesis testing, analysis of variance, multifactor analysis of variance, linear regression and correlation, nonlinear and multiple regression, the analysis of categorical data and non-parametric procedures.
3 Class Hours; Prerequisite: MAT 124 Statistics I or MAT 125 Statistics I w/Computers and MAT 139 Algebra

MAT 245 Design of Experiments (3)

This course is an introduction to the most common types of statistical designs and analyses of experiments. Topics include single-factor experiments with randomized blocks, Latin squares, incomplete blocks, two factor experiments, 2k and 3k designs with correspondence, fractional designs, and other selected topics.
3 Class Hours; Prerequisite: MAT 224 Statistics II

MAT 250 Discrete Mathematics (4)

Sets, functions, proof techniques, relations, partially ordered sets, order isomorphisms, combinatorics including permutations, combinations, the pigeonhole principle, binomial and multinomial coefficients, recurrence relations, generation functions, the principles of inclusion-exclusion, graph theory including paths and connectedness, Eulerian and Hamiltonian graphs, graph isomorphisms, trees, binary search trees and Huffman codes, minimum spanning trees, directed graphs and networks and finite state machines.

4 Class Hours; Prerequisite: MAT 182 Calculus II with Analytic Geometry

MAT 264 Linear Algebra (4)

Linear equations and matrices, real vector spaces, the algebra of linear transformations and matrices, determinants, eigenvalues and-eigen-vectors.

4 Class Hours; Prerequisite: MAT 182 Calculus II with Analytic Geometry

MAT 266 Introduction to Higher Mathematics (3)

Exposure to basic mathematical methods and concepts. Sets, sequences, mapping, convergence. Preparation for analysis, topology and modern algebra. Recommended for Mathematics majors, Computer students and Engineering Science students, as advised.

Prerequisite or Corequisite: MAT 281 Calculus III with Analytic Geometry or permission of instructor

MAT 281 Calculus III with Analytic Geometry (4)

Infinite series and convergence testing, power series, radius of convergence. Partial differentiation, directional derivatives, gradients, maxima and minima. Volume and other applications done by multiple integrals. Line integrals and Green's Theorem. Introduction to first and second order differential equations.

Prerequisite: MAT 182 Calculus II with Analytic Geometry

MAT 282 Differential Equations with Linear Algebra (4)

First order differential equations. Matrices, determinants and solutions of systems of linear equations. Vector spaces, Wronskians, linear transformations and differential operations. Characteristic values and vectors, real symmetric matrices, functions of matrices. Homogeneous and nonhomogeneous linear differential equations with constant coefficients, undetermined coefficients and variations of parameters. Matrix formulation of linear systems of differential equations and solution by characteristic values, the exponential matrix function, nonhomogeneous linear systems, Laplace transforms and power series solutions.

4 Class Hours; Prerequisite: MAT 281 Calculus III with Analytic Geometry

MAT 299 Independent Study (1-4)

The student undertakes an independent project in his/her specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving work assignment.

Prerequisite: Department Chairperson Permission

MDA 102 Medical Assisting Science (2)

Introduction to the profession of medical assisting. Qualifications and duties, professional affiliation, history of medicine, ethics and professionalism, the role of the medical assistant in the physician's office. Interactions with patients and staff.

2 Class Hours

MDA 104 Keyboarding and Medical Word Processing (2)

Introduction to and development of basic keyboarding skills on typewriters and computer keyboards and introduction to word processing. Students will have the opportunity to learn keyboarding and word processing functions and apply that knowledge with hands-on development of skills. Emphasis will be on application to medical correspondence, reports, and chart notes. For Health Science students only.

4 Laboratory Hours; Prerequisite: BIO 131 Human Biology and MRT 106 taken concurrently or consent of instructor

MDA 106 Medical Correspondence and Communications (2)

Development of correspondence and communication skills. Fundamentals of machine-dictated and written medical reports and correspondence. Patient related communications, such as reception and telephone techniques, message taking and patient information skills. For Medical Assisting students.

4 Laboratory Hours; Prerequisite: MRT 106 Medical Terminology I and MDA 104 Keyboarding and Medical Word Processing or consent of instructor

MDA 114 Standard First Aid Management of Emergencies (1)

The causes, care and prevention of accident/emergency lifesaving situations. Mastery level of learning for the proficiency of basic skills. Certification by National Safety Council. Recognizing, managing and aiding the physician in medical emergencies and maintaining emergency supplies.

2 Laboratory Hours

MDA 115 Medical Assisting Procedures I (4)

Basic clinical procedures of medical assisting in the physician's office. Use and management of diagnostic instruments and equipment. Related patient care, professional ethics, medical terminology nomenclature. For Medical Assisting students.

3 Class Hours, 2 Laboratory Hours; Prerequisite: MRT 106 Medical Terminology or consent of instructor

MDA 201 Medical Assisting Procedures II (4)

Introduction to basic microbiology, hematology and urinalysis. Collection, preparation and testing of blood, urine and body fluids. Significance of laboratory analysis. For Medical Assisting students.

2 Class Hours, 4 Laboratory Hours; Prerequisite: BIO 132 Human Biology II, MDA 115

MDA 206 Medical Office Management (4)

Medical office administrative procedures, such as bookkeeping principles and practices, patient health records, insurance forms, banking and postal services, payroll records, patient accounts, office machines. Mechanics of applicable medical correspondence. Appointment scheduling, supplies and inventory. Emphasis on practical application of administrative techniques. For Medical Assisting students.

3 Class Hours, 3 Laboratory Hours; Prerequisites: MDA 102 Medical Assisting Science and MDA 106 Medical Correspondence and Communications

MDA 208 Medical Ethics, Law and Economics (3)

Emphasizing the medical ethics which set the standards of conduct for physicians, as well as guidelines for medical assistants. Requirements to practice medicine, legal liabilities of the profession, and the importance of medicolegal consent forms. Legal arrangements of private medical practices, medical care financing, and systems of health care delivery

3 Class Hours

MDA 210 Pharmacology (2)

A practical course relevant to health science courses. Emphasizes knowledge of prescriptions and prescription writing. Basic principles of mathematics in pharmacy. Drugs governed by U.S.P. standards which are in common use and the generic-pharmaceutical relationship. Drug grouping action in relation to human physiology. For Health Science students.

2 Class Hours; Prerequisite: BIO 132 Human Biology II or consent of instructor

MDA 211 Medical Assisting Procedures III (4)

Advanced technical procedures in medical assisting specifically oriented to the various medical specialties. Techniques of electrocardiography, audiometry and physical therapy. Field trips and practical experiences give additional background outside of the classroom.

2 Class Hours, 4 Laboratory Hours; Prerequisite: BIO 132 Human Biology, MDA 115, Medical Assisting Procedures I and II MDA 201

MDA 245 Directed Practice (5)

Directed practical experience as an extern in physician's offices, medical centers, school health departments, rehabilitation clinics, and other health care facilities, weekly seminar. For senior Medical Assisting students who must have a 2.0 overall average.

1 Class Hour, 16 Laboratory Hours; Prerequisites: MDA 206 Medical Office Management and MDA 201 Medical Assisting Procedures II. MDA 211 Medical Assisting Procedures III and MDA 210 Pharmacology must be taken previously or concurrently

MET 110 Introduction to Technologies (1/2)

Personal computers are used to familiarize students with a software package that includes word processing, spread sheets and graph construction. Library research, local industry tours, and a review of employment and transfer opportunities provide students with valuable insight into their future roles in Mechanical Engineering Technology.

1 Class Hour

MET 112 Metrology (3)

The study of the science of measurement. Systems of measurement. Accuracy, precision and reliability compared. Standards, including surface finish. Students learn to use the steel rule, calipers, micrometers, fixed gauges, feeler gauges, radius gauges, gauge blocks and surface plates, height and planer gauges, V-blocks, toolmaker's flat, mechanical indicating equipment, visual gauge, air gauges, toolmaker's microscope, optical flats and angle measuring equipment. Calibration of instruments and appropriate record keeping.

3 Class Hours; Prerequisite: MAT 124 Statistics I or MAT 139 Algebra

MET 113 Engineering Drawing I (2)

An introductory course designed to develop understanding and problem-solving skills necessary to use the principles of descriptive geometry and orthographic projection used in preparing engineering drawings. Topics to include dimensioning, sectional views and auxiliary views.

1 Class Hour, 3 Laboratory Hours

MET 116 Engineering Drawing II with CAD (2)

A second course in engineering drawing, emphasizing layout, detail and assembly drawings. Includes topics in geometric dimensioning and tolerancing with an introduction to computer aided drafted.
1 Class Hour, 3 Laboratory Hours; Prerequisite: MET 113 Engineering Drawing I

MET 118 Survey of Basic Industrial Safety and First Aid (3)

Work area safety, safe material handling, tool and equipment safety, machinery safeguards, personal protection, electrical safety, hazardous materials and operation, fire prevention, understanding OSHA, first aid.
2 Class Hours

MET 121 Manufacturing Processes I (3)

A basic study of manufacturing materials and processes, such as producing and processing ferrous and non-ferrous metals, metallurgy and heat treatment of steel, hot and cold working techniques, welding, and various casting processes. Laboratory exercises provide an opportunity for actual practice in the operation of selected manufacturing production equipment.
2 Class Hours, 2 Laboratory Hours

MET 122 Manufacturing Processes II (2)

A continuation of Manufacturing Processes I. Special topics include screw thread systems and their measurement, electrical discharge machining, indexing, gear terminology and ,manufacturing methods, and CNC Machining. Laboratory exercises parallel classroom topics and will provide the student with an opportunity to practice some of these manufacturing methods.
1 Class Hour, 3 Laboratory Hours; Prerequisite: MET 121 Manufacturing Processes I

MET 132 Applied Mechanics (4)

STATICS: Free body diagram, trusses, friction, centroids, moments of inertia.
DYNAMICS: Motion of particles and bodies without consideration of the forces required to produce or maintain motion (Kinematics), unbalanced forces and the motion they produce (kinetics), work and energy, impulse and momentum.
4 Class Hours; Prerequisites: PHY 141 Physics and MAT 161 Pre-Calculus or equivalent or Department Chairperson approval

MET 141 Mechanical Drawing I (2)

An introductory course in the fundamentals of engineering drawing. Topics include lettering, geometric construction, basic dimensioning, orthographic projection, sectioning, auxiliary view, sketching and shape description.
1 Class Hour, 2 Laboratory Hours

MET 142 Mechanical Drawing II w/CAD (2)

A continued study in engineering drawing with an introduction to a CAD System. Selected topics to include assembly drawings, fits and tolerances, geometric dimensioning and tolerancing along with an introduction to CAD.
1 Class Hour, 2 Laboratory Hours; Prerequisite: MET 141 Mechanical Drawing I

MET 211 Computer Aided Drafting (2)

Introduction to the College's Mechanical CAD System. Command structure, screen controls, and use of commands to draw and manipulate two-dimensional models. Command history files. Introduction to three-dimensional work. Selected topics.
1 Class Hour, 2 Laboratory Hours; Prerequisites: Cartesian/Polar Coordinate Systems and Background in Engineering Drawing.

MET 220 Programming CNC Machine Tools (3)

An introductory course in the fundamentals and some of the advanced principles of CNC Milling/Turning. Topics to include: Introduction to NC/CNC Machinery (history, input media and tooling), New Part Production Set-up, Typical Controller Operations (store, load and edit programs) and "Manual Part Programming" of CNC machine tools using the industry standard "G" and "M" Codes.
2 Class Hours, 2 Laboratory Hours; Prerequisite: MET 122 Manufacturing Processes II

MET 221 Tool Design (4)

Introduction to the problems of tool design with emphasis on planning the process of production, designing and developing the necessary tools, and utilizing available manufacturing facilities. Practical analysis and comparison of the use and cost of tools, jigs and fixtures, dies, molds and gages as they are used in modern manufacturing.
4 Class Hours, Prerequisite: MET 122 Manufacturing Process II and MAT 139 Alegbra

MET 222 Hydraulics and Pneumatics (3)

Basic theory of hydraulic and pneumatic systems. Combinations of systems in various circuits, basic designs and functions of circuits and motors, controls, electro-hydraulic servo-mechanisms, plumbing, filtration, accumulation and reservoirs.
2 Class Hours, 2 Laboratory Hours; Prerequisite: MET 132 Applied Mechanics

MET 223 Computer Integrated Machining (3)

A continuation of Programming CNC Machine Tools. The emphasis of this course is on "Computer Assisted Part Programming." The course is designed to include students who have had no exposure to computer operations, but have knowledge of machine shop operations including CNC machine tools. The MS-DOS operating system and CAD/CAM software are introduced. Students use CAD to create part drawing files and CAM to choose the machining process, assign tool parameters, define the tool path, give path verification, develop the post-processor and to transfer the CNC code to the CNC machine tool.
2 Class Hours, 2 Laboratory Hours; Prerequisite: MET 220 Programming CNC Machine Tools

MET 224 Control Systems (3)

Hydraulic, pneumatic, mechanical, electrical and electronic control systems and components. Basic description, analysis and explanation of operation. Typical performance characteristics, limitation on performance accuracy, applications and their utilization in industrial processes.
3 Class Hours, Prerequisite: MET 122 Manufacturing Process II and MET 222 Hydraulics and Pneumatics

MET 235 Strength of Materials (3)

Normal, shear, bearing, thermal and torsional stresses and strains. Stress-strain curves. Shearing forces, bending moments, shearing stresses and deflection of beams. Columns and pressure vessels. Students will be required to write programs in FORTRAN.
2 Class Hours, 3 Laboratory Hours; Prerequisite: MET 132 Applied Mechanics and CST 122 FORTRAN

MET 236 Statics and Strength of Materials (4)

The study and analysis of applied forces and the effects these forces have on engineering materials. The laws of force and moment of equilibrium are used to develop free body diagrams and solve problems in concurrent and nonconcurrent force systems. Calculated forces are then used to study the stress-strain relationships developed as a result of tension, compression, shearing, torsion and bending of various materials.
3 Class Hours, 3 Laboratory Hours; Prerequisites: MAT 140 Trigonometry and PHY 141 Physics I

MET 238 Mechanical Design (4)

Application of the principles of strength of materials to the design of machine elements. Design and analysis of shafts, analysis of mechanism: displacement, velocity and acceleration. Design of cam profiles. Students will be required to write programs in FORTRAN.
3 Class Hours, 3 Laboratory Hours; Prerequisite: MET 235 Strength of Materials

MET 243 Fluid Mechanics (3)

The study of fluid statics and dynamics. Topics include fluid forces, flow measurement, the steady flow energy equation, viscosity, laminar and turbulent flow, frictional losses, pipeline systems, drag and lift. Writing Emphasis Course.
2 Class Hours, 3 Laboratory Hours; Prerequisite: MET 132 Applied Mechanics

MET 244 Thermodynamics (3)

A study of the property and energy relationships in non-flow and steady flow applications. Topics include ideal gas relationships, real working substances, the first and second law of thermodynamics, thermodynamic cycles, and available energy. The cycle concept is applied to steam power, internal combustion engines, gas turbines, refrigeration and heat pumps. Consideration is also given to combustion analysis, and heat transfer.
2 Class Hours, 3 Laboratory Hours; Prerequisite: PHY 142 Physics II

*MET 246 Refrigeration and Air Conditioning (3)

Review of selected topics in thermodynamics, fluid mechanics and heat transfer. Analysis of the mechanical refrigeration cycle and psychometric processes. Determination of heating and cooling loads. Introduction to the design of air handling systems and the selection of heating and cooling equipment.
3 Class Hours; Prerequisite: PHY 141 Physics

MET 252 Engineering Materials (4)

Atomic bonding, crystals, noncrystalline materials, phase equilibria, microstructures, strengthening and toughening of materials, polymers and composites, conduction materials, magnetic and dielectric properties, and corrosion.
3 Class Hours, 3 Laboratory Hours; Prerequisites: MET 235 Strength of Materials and MET 121 Manufacturing Processes I

*MET 253 Engineering Materials (3)

Atomic bonding, crystals, noncrystalline materials, phase equilibria, microstructures, strengthening and toughening of materials, polymers and composites, conduction materials, magnetic and dielectric properties, and corrosion.
3 Class Hours, 3 Laboratory Hours; Prerequisites: MET 235 Strength of Materials and MET 121 Manufacturing Processes I

•All asterisked (*) courses are taught evenings only and when enrollment permits.

MET 263 Engineering Statistics and Quality Control (2)

Introduces measures of the central tendency and dispersion of data. Relates the theories of statistics and probability to the industrial techniques of control charting and acceptance sampling. Emphasizes the concepts of accuracy, precision, and repeatability in engineering measurement. Topics include normal, hypergeometric, binomial, and Poisson distributions; control charts for mean, range, fraction defective, etc.; single and multiple, sampling; specifications tolerances, and measurement.

1 Class Hour, 2 Laboratory Hours; Prerequisite: MAT 161 Pre-Calculus or MAT 139 Algebra

*MET 280 Management Decisions (2)

Objective criteria and evaluation in making decisions. Currently accepted procedures to conceive management models and systems.

2 Class Hours

*MET 285 Time, Motion and Wage Study (2)

Analysis of time spent and methods used for industrial tasks. Relations to wage structure on individual and plant-wide basis.

2 Class Hours; Prerequisite: MAT 139 Algebra

*MET 286 Production Control (2)

Planning, scheduling and routing of goods through a plant from raw materials to finished products. Production control principles, the control of manufacturing processes.

2 Class Hours; Prerequisite: MAT 139 Algebra

*MET 287 Plant Layout and Materials Handling (2)

Plant arrangement as it influences industrial operations. Assembling data, coordinating operations, developing operational layouts, evaluative arrangements. Materials handling requirements, planning and evaluation.

2 Class Hours; Prerequisite: MAT 139 Algebra

MET 295 Seminar (1-3)

An opportunity for the interested student to become involved with the process of research, formal paper preparation, formal delivery and defense of ideas presented. Also a critical evaluation of ideas set forth by others.

Prerequisite: As established by the Department Chairperson

MET 299 Independent Study (2-4)

The student undertakes an independent project in his specialty under the guidance of a faculty member. Only one independent study course allowed per semester. Consideration may be given a project involving a work assignment.

Prerequisite: Approval of Department Chairperson

MLT 110 Introduction to Medical Laboratory Technology (1)

Overview of medicine and the field of Medical Technology. Designed to acquaint the student with the clinical laboratory and with the professional role of the technologist/technician in that setting. Discussions will include the variety of opportunities open to those entering the field.

1 Class Hour

MLT 201 Hematology and Coagulation (3)

Comprehensive study of the hemopoietic and hemostatic systems and the normal physiology and classic pathology of both systems. Emphasis is on the mechanics and interpretation of routine and special test procedures.

3 Weeks: 2 Class Hours, 4 Laboratory Hours per day; Prerequisite: BIO 132 and approval of MLT advisor

MLT 201P Hematology and Coagulation Practicum (3)

Clinical experience in the hematology laboratory of an affiliated hospital. Designed for observation and development of technical skills needed to perform in a hematology/coagulation laboratory.

3 Weeks: 30 Hours per week of practicum; Corequisite: MLT 201 Hematology and Coagulation

MLT 202 Urinalysis/Body Fluids (1)

Study of the physiologic processes which result in the formation of urine and body fluids. Emphasis on analysis of fluids and interpretation of test results.

1 Week: 2 Class Hours, 4 Laboratory Hours per day; Prerequisite: BIO 132 and permission of MLT advisor

MLT 202P Urinalysis/Body Fluids Practicum (1)

Clinical experience in the Urinalysis/Body Fluid area of an affiliated hospital. Designed to give students experience and competence in performing standard laboratory techniques.

1 Week: 40 Hours of Practicum; Corequisite: MLT 202 Urinalysis/Body Fluids

MLT 203 Microbiology (6)

Survey of the microbial world, from taxonomy, morphology, and structure to metabolism, genetics, and growth characteristics of microbes. Emphasis in the latter part of course on the isolation and identification of medically important microbes.

5 Weeks: 3 Class Hours, 3 Laboratory Hours per day; Prerequisite: BIO 132 and permission of MLT advisor

MLT 203P Microbiology Practicum (2)

Clinical experience in the Microbiology area of an affiliated hospital. Students gain competence in diagnostic techniques used in the growth and identification of medically important microbes.

2 Weeks: 40 Hours per week; Corequisite: MLT 203 Microbiology

MLT 204 Phlebotomy (1)

Training and experience in the practice of phlebotomy, teaching students to recognize and use blood collection equipment, practice universal precautions, and perform procedures of routine venipuncture and skin puncture. Practical experience at affiliated hospitals.

8 Class Hours; 30 Practicum Hours

MLT 205 Immunology (4)

Study of mechanisms of immune response, including discussions of humoral and cell-mediated immunity, complement, phagocytosis, and the interaction of all systems. Immunodeficiency, autoimmunity, immune proliferation and immunopathology examined in relation and contrast to normal immune function. Laboratory sessions emphasize testing to determine immune status and diagnose disease.

3 Weeks: 2 Class Hours, 4 Laboratory Hours per day, to include simulated experience; Prerequisite: BIO 132 and permission of MLT advisor

MLT 205P Immunology Practicum (1)

Clinical experience in the immunology area of an affiliated hospital. Designed to give students experience and competence in performing standard laboratory techniques.

1 Week: 35 Hours; Corequisite MLT 205

MLT 206 Immunohematology (2)

Introduction to the field of blood banking. Theoretical knowledge of blood groups and blood grouping, component and transfusion therapies, transfusion reactions, and allo- and autoantibody formation. In laboratory sessions the student performs ABO and Rh grouping, antibody identification, and compatibility testing.

2 Weeks: 2 Class Hours, 4 Laboratory Hours per day; Prerequisite: MLT 205 or permission of MLT advisor

MLT 206P Immunohematology Practicum (2)

Experience in the Blood Bank of an affiliated hospital. Students perform routine blood bank procedures.

2 Weeks: 35 Hours per week; Corequisite: MLT 206 Immunohematology

MLT 207 Clinical Chemistry (5)

Designed to cover the principles and analytical methods of clinical chemistry as performed in the medical laboratory. The relationship of physiochemical measurements of body function in health and disease including the renal, liver, digestive and respiratory systems. Emphasis on those chemical tests which evaluate the function of these systems related to metabolism, protein synthesis, pH, blood gases, electrolyte balance, enzymes and hormones. Laboratory work includes the theory, operation and maintenance of the specialized and semi- and fully automated analytical instrumentation used to perform these chemical tests.

5 Weeks: 2 Class Hours, 4 Laboratory Hours per day; Prerequisite: CHM 146, CHM 133 and permission of MLT advisor

MLT 207P Clinical Chemistry Practicum (3)

Clinical experience in the Chemistry and special Chemistry areas of an affiliated hospital. Students practice methods learned in MLT 207 Clinical Chemistry to expand their technical skills into a broader range of equipment and more advanced instrumentation.

3 Weeks: 35 Hours per week; Corequisite: MLT 207 Clinical Chemistry

MRT 101 Medical Record Science I (4)

Functions of a medical record department and overview of the professional association. Definition of, standards for, and development of a medical record as to content, format, evaluation and completion. A comprehensive review of the organization of the medical staff. Numbering and filing systemsand methods. Overview of accrediting agencies for health care facilities.

3 Class Hours; Corequisite: MRT 101L Medical Record Science Laboratory

MRT 101L Medical Record Science Laboratory (0)

Practical application in the medical record laboratory of the principles described in the lecture mode of this course.

2 Laboratory Hours; Corequisite: MRT 101 Medical Record Science I

MRT 106 Medical Terminology (3)

A study of the language of medicine, including suffixes, prefixes and root words. Emphasis on terminology associated with the anatomic systems.

MRT 107 Medical Transcription (3)

Orientation to typewriting techniques and skills as well as basic word processing techniques utilizing the IBM-PC. Introduction to various medical reports, format and basic medical transcription.

2 Class Hours, 2 Laboratory Hours; Prerequisite: MRT 105/106 Medical Terminology

•All asterisked (*) courses are taught evenings only and when enrollment permits.

MRT 110 Medical Record Science II (4)

A study of the purpose of classifying diseases and operations. In-depth study of ICD-9-CM, basic coding principles. Introduction to the prospective payment system utilizing DRGs.
3 Class Hours; Prerequisite: MRT 101 Medical Record Science I; Corequisite: MRT 110L Medical Record Science II Laboratory

MRT 110L Medical Record Science II Laboratory (0)

Actual practice of coding medical records utilizing various classification systems, and assignments of DRGs.
3 Laboratory Hours; Corequisite: MRT 110 Medical Record Science II

MRT 144 Directed Practice (2)

Directed summer practical experience in the hospital medical record department. Development of insight and skills into the basic medical record procedures. Graduation requirement.
40 Laboratory Hours per week for 2 Weeks; Prerequisite: MRT 110 Medical Record Science

MRT 202 Medical Record Science III (4)

A study of medical record department indexes, registers, and data abstracting and retrieval methods. In-depth treatment of basic hospital and vital statistics. Data display and report generation.
3 Class Hours; Prerequisites: MRT 110 Medical Record Science II and BIO 132 Human Biology or permission of instructor; Corequisites: MRT 202L Medical Record Science III Laboratory and BIO 140 Pathophysiology

MRT 202L Medical Record Science III Laboratory (0)

Applications of the principles learned in the lecture mode of this course.
2 Laboratory Hours; Corequisite: MRT 202 Medical Record Science III

MRT 210 Medical Record Science IV (4)

Principles of management and the role of the supervisor in the medical record department. Developmental and operational phase of health information systems. Trends in health care delivery systems. Overview of ambulatory care,long-term care and psychiatric facilities. Introduction to problem-oriented Medical Record System.
3 Class Hours; Prerequisites: MRT 202 Medical Record Science III and MRT 202LMedical Record Science II Laboratory; Corequisite: MRT 210L Medical Record Science IV Laboratory

MRT 210L Medical Record Science IV Laboratory (0)

Practical application of the principles in the lecture mode of this course.
2 Laboratory Hours; Prerequisites: MRT 110 Medical Record Science II and MRT 144 Directed Practice

MRT 214 Alternate Classification Systems (2)

An indepth study of nomenclature/classification systems such as CPT-4, DSM-III, ICD-0, SNOMED, SNOP. Overview and application of policies and procedures for ambulatory care coding and data collection.
1 Class Hour, 2 Laboratory Hours; Prerequisite: MRT 110 Medical Record Science

MRT 222 Medical Legal Aspects (3)

Introduction to legal aspects of medical records. Legal basis for medical practice, confidentiality. Patient's "Bill of Rights," voluntary and involuntary release of medical information. Authorizations and consents, professional liabilities, medical-moral issues such as abortion, euthanasia, sterilization, artificial insemination.
3 Class Hours; Prerequisite: MRT 202 Medical Record Science

MRT 236 Quality Assurance (3)

A study of the components of a quality assurance program — quality assessment,utilization management, and risk management.
1 Class Hour, 2 Laboratory Hours; Prerequisite: MRT 110 Medical Record Science

MRT 245 Directed Practice (6)

Directed practice experience in the hospital and related sites. Correlated with MRT 210 Medical Record Science to develop insight and skills into advanced medical record procedures.
6 Weeks: 40 Hours per week; Prerequisites: MRT 202 Medical Record Science and MRT 144 Directed Practice

MRT 295 Medical Record Seminar (2)

Detailed study and analysis of specific problems encountered in the administration of a medical record department. Correlated with directed clinical practice. Case study and extensive literature review.
2 Class Hours

MUS 101 Introduction to Music (3)

A survey course examining the music of the great composers representing each major period of Music History. How to listen to different forms of music such as symphonies, concertos, opera and jazz will be included in the topics covered. Emphasis on developing listening skills to bring the student to an informed awareness and understanding of great music.
3 Class Hours

MUS 105 Music Theory I (3)

A beginning course in music theory, including basic rudiments of music. Pitch and rhythmic notation, scales and intervals. Ear training through melodic and rhythmic drills and dictation.
3 Class Hours

MUS 106 Music Theory II (3)

Continuation of Music Theory I. Traditional harmony, exercises in melodic, rhythmic and harmonic dictation, aural analysis, beginning composition.
3 Class Hours; Prerequisite: MUS 105 Music Theory I or consent of instructor

MUS 107 Music Theory III (3)

A continuation of MUS 106 Music Theory II. Writing and analyzing seventh chords, secondary and borrowed chords, modulation, and musical form will be addressed.
3 Class Hours; Prerequisite: Mus 106 - Music Theory II

MUS 111 19th Century Music (3)

Important musicians and musical styles of the Romantic Period. Emphasis on developments in piano literature, the symphony orchestra and opera. Listening to selected recordings and attendance at local concerts.
3 Class Hours; Prerequisite: MUS 101 - Introduction to Music or Permission of the Instructor

MUS 112 20th Century Music (3)

Important musicians and musical styles of the 20th century. Emphasis on the trends and development of music in America. Leading European composers.
3 Class Hours; Prerequisite: MUS 101 Introduction to Music or consent of instructor

MUS 114 History of Opera (3)

A survey of the various styles of opera from the 17th through the 20th centuries. Emphasis on the works of master composers — Monteverdi, Mozart, Verdi and Wagner; impact of opera on music history; social and cultural contents of opera.
3 Class Hours; Prerequisite: MUS 101 or permission of instructor

MUS 115 Ear Training I (1)

Aural training in melodic dictation and sight singing in two clefs. Also discrimination of intervals needed to sight read music.
2 Studio Hours

MUS 116 Ear Training II (1)

A continuation of MUS 115 - Ear Training I. Emphasizes dictation in two parts in various clefs and further develops interval and rhythmic discrimination.
2 Studio Hours; Prerequisite: MUS 115 - Ear Training I

MUS 117 Ear Training III (1)

A continuation of MUS 116 - Ear Training II. Will stress the development of dictation in three parts, modulation, and sightsinging.
2 Studio Hours; Prerequisite: MUS 116 - Ear Training II

MUS 120 Piano Class I (1)

Group piano lessons are given which will allow students the opportunity to develop basic piano skills and develop proper technique on the instrument.
2 Laboratory Hours

MUS 121 Piano Class II (1)

This course is a continuation of Piano Class I and further develops the necessary piano skills required to perform elementary to intermediate piano literature.
2 Laboratory Hours; Prerequisite: MUS 120 Piano Class I

MUS 180 Jazz Improvisation (2)

Basic concepts of soloing in the jazz idiom for instrumentalists. Teach students to interpret chord symbols and understand the sounds that they represent in a meaningful way to create a jazz solo with their instrument. Attendance at jazz concerts required.
1 Class Hour, 3 Studio Hours; Prerequisite: MUS 105 Music Theory I or permission of instructor; May be repeated for credit once

MUS 185 Beginning Guitar (1)

Emphasis on Music Fundamentals, scales, chords, reading rhythms and learning to accompany singers. Students must own their own instruments.
2 Studio Hours

MUS 186 Guitar Ensemble (1)

Provide students the opportunity to perform music for the guitar in a group setting. Emphasis will be on group and individual playing. The music played will be chosen with respect to the historical literature available.
2 Studio Hours; May be repeated for credit 3 times

MUS 187 The Guitar: Its History and Music (3)

The development of the physical and musical history of the instrument is presented through live performances and recordings. The history of the guitar and its importance relative to composers and performers throughout music history will be identified.
3 Class Hours

MUS 188 Practical Music Theory for the Performing Musician (3)

Designed to help the novice performer of music understand key signatures, scales, rhythms, chords, form intervals, transposition, notation and sight reading. Emphasis on fundamentals of music and practical application of what is learned.
3 Class Hours

MUS 190 The College Choir (1)

Students who sing in the College Choir receive one credit per semester.
3 Studio Hours (May be repeated 3 times for credit.)

MUS 191 Music Performance (1)

Students who participate in the recitals or concerts of the academically associated Broome Community College Music Performance groups receive one credit per semester.
May be repeated 3 times for credit

MUS 192 Woodwind Ensemble (1)

May be repeated 3 times

MUS 193 Brass Ensemble (1)

May be repeated 3 times

MUS 194 Voice Class I (1)

Provides any student the opportunity to learn correct vocal production, breath control, diction, articulation and musical interpretation of art songs. Emphasis is on tonal production and group and individual singing.
2 Studio Hours

MUS 195 Jazz Ensemble (1)

By audition only.
May be repeated 3 times

MUS 196 String Ensemble (1)

(Not for guitarist.)
May be repeated 3 times

MUS 197 Applied Music I (1)

For students in their first semester. To enable instrumental and vocal students to study privately with a teacher and develop their musical performance abilities. Not a course for beginners. A minimum of 15 lessons required per semester. Cost of lessons not included in BCC tuition.
2 Studio Hours

MUS 198 Applied Music II (1)

Continuation of MUS 197 Applied Music I, for second semester students. A minimum of 15 lessons required per semester and continued musical growth and maturity in solo and ensemble performance is expected. Cost of lessons not included in BCC tuition.
2 Studio Hours; Prerequisite: MUS 197 Applied Music I

MUS 199 Intermediate Guitar (1)

Continuation of beginning guitar. Emphasis on picking techniques, fingerings, chords, music readings and performance. There will also be a greater emphasis on technique.
2 Studio Hours

MUS 201 College Band (1)

College band is required of all woodwind, brass and percussion majors and open to the campus community. The band performs two major concerts during the year as well as providing music for various college functions. Membership is by audition. May be repeated three times.
2½ Laboratory Hours

MUS 294 Voice Class II (1)

Continuation of Voice class I and for students who have performed in high school musicals, chorus and/or those who have studied privately. This is a group situation in which vocal literature appropriate to individual and group singing will be sung.
2 Studio Hours; Prerequisite: MUS 194 Voice Class I or permission of instructor

MUS 297 Applied Music III (1)

Continuation of MUS 198 Applied Music II, for third semester students.
2 Studio Hours; Prerequisite: MUS 198 Applied Music II

MUS 298 Applied Music IV (1)

Continuation of MUS 197 Applied Music III, for fourth semester students.
2 Studio Hours; Prerequisite: MUS 297 Applied Music III

MUS 299 Independent Study: Music (1-3)

An individual student project concerned with advanced work in a specific area of music. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.
Prerequisite: 3 semester hours of college level work in music

PED 100 Archery (1/2)

Fundamentals of shooting — seven-step approach. Proper target shooting technique and form stressed.
4 Class Hours, 11 Laboratory Hours per semester

PED 103 Backpacking (1)

A series of laboratories and lectures culminating in a four-day mandatory backpacking trip. Students learn to select, care for, and use properly the essential equipment, as well as some low-cost alternatives to expensive items. The stress is on safety and low ecological impact camping.
15 Class Hours, 15 Laboratory Hours per half semester

PED 106 Badminton (1/2)

Instruction and practice in the various strokes. Rules, terminology and equipment. Strategy for singles and doubles.
4 Class Hours, 11 Laboratory Hours per half semester

PED 112 Bowling (1/2)

Bowling fundamentals including ball selection, grip, stance, approach and delivery. Etiquette, scoring, correction of basic mistakes in delivery. Classes are at off-campus site and students must pay for own games, shoe rental and transportation.
3 Class Hours, 12 Laboratory Hours per half semester

PED 118 Personal Fitness (1)

Individualized physical fitness program. Students identify their personal fitness profiles then participate in an exercise program designed to improve or maintain their fitness levels.
8 Class Hours, 22 Laboratory Hours

PED 119 Personal Fitness (1½)

Individualized physical fitness program. Students identify their personal fitness profiles, then participate in an exercise program designed to improve or maintain their fitness levels.
12 Class Hours, 33 Laboratory Hours

PED 121 Golf (1/2)

Skills, etiquette and strategy. Student required to play nine holes and hit at a driving range, providing their own transportation and fees. Clubs provided for those without.
4 Class Hour, 11 Laboratory Hours per half semester

PED 122 Horsemanship (1)

Basics of grooming, saddling and safety procedures. Development and expansion of riding skills. Elementary knowledge of horses, their care and maintenance.Two options available: 1. English. 2. Western. (Additional fee and taught off-campus.)
8 Class Hours, 22 Laboratory Hours per semester

PED 127 Jogging (1/2)

Jogging as a possible leisure time activity. Physiological benefits, improvement of technique and basic principles of training. Individual works at own level and sets own goals. Distance usually worked: 2 miles
3 Class Hours, 12 Laboratory Hours per semester

PED 130 Karate (1)

Classical karate on the beginning and intermediate levels. Philosophy and brief history of karate. Basic kata (forms) together with self-defense and prearranged sparring techniques. Free sparring with no body contact. Emphas is on physical conditioning and mental discipline.
8 Class Hours, 22 Laboratory Hours per semester

PED 135 Jazz Dance I (1)

A high energy dance form that utilizes contemporary style music. Jazz dance develops rhythmic awareness, movement coordination, strength and flexibility.
8 Class Hours, 22 Laboratory Hours per semester

PED 137 Jazz Dance II (1)

A high energy dance form that utilizes contemporary style music. Jazz dance develops rhythmic awareness, movement coordination, strength and flexibility.
8 Class Hours, 22 Laboratory Hours per semester; Prerequisite: PED 135 or permission of instructor

PED 139 Self-Defense (1/2)

Brief explanation of karate, judo and other martial arts. Approximately 10 basic self-defense movements which, if properly acquired and practiced, can be applicable to many situations. Basic techniques of throwing, blocking, falling, punching and general body shifting motions. No definite dress required. A student should remember that exercises are meant to increase flexibility and endurance of muscles, and the dress should be a comfortable one for this purpose. Although this is not the formal karate class, the class will be conducted with formality and discipline
3 Class Hours, 12 Laboratory Hours per semester

PED 143 Cross-Country Skiing (1/2)

Instruction and practice in cross-country skiing — beginning through advanced. Conduct, terminology, safety and equipment. Classes both on and off campus. Skis, poles, bindings provided; students responsible for boots and transportation.
3 Class Hours, 12 Laboratory Hours per semester

PED 144 Aerobics (1½)

Movement and exercise done with music to achieve cardiovascular fitness, improve muscle tone, develop body awareness, increase energy. Open to both men and women.
12 Class Hours; 33 Laboratory Hours

PED 146 Aerobics (1)

Movement and exercise done with music to achieve cardiovascular fitness, improve muscle tone, develop body awareness, increase energy. Open to both men and women.
8 Class Hours, 22 Laboratory Hours per semester

PED 147 Soccer (Women) (1/2)
PED 148 Soccer (Men) (1/2)
Instruction and practice in the fundamental skills of kicking, tackling, trapping, dribbling and heading. Rules and tactics. Team competition. Separate sections for men and women.
4 Class Hours, 11 Laboratory Hours per half semester

PED 149 Snorkeling (1)
Designed to teach the swimmer the techniques of snorkeling, safety equipment selection and skills. Offered to student taking Tropical Ecology during intersession.
8 Class Hours, 22 Laboratory Hours per semester

PED 150 Personal Nutrition (1)
Students will learn the basic principals of good nutrition; how energy nutrients work within their body and how they can use nutrition to improve their overall health. They will also be able to utilize this information to decipher the current nutrition recommendations being addressed in the media.
15 Class Hours

PED 169 Tennis (1/2)
Instruction and practice in the basic strokes — forehand, backhand, serve and volley. Rules, terminology and equipment. Strategy for singles and doubles.
4 Class Hours, 11 Laboratory Hours per half semester

PED 170 Trail Riding (1/2)
Basics of grooming, saddling, and safety procedures. Development and expansion of riding skills — learning to cope with natural hazards like creeks, traffic, terrain. Elementary knowledge of horses, their care and maintenance. (Taught off campus and an additional fee is required.)
4 Class Hours, 11 Laboratory Hours per half semester

PED 171 Physiology of Exercise (1)
Designed to develop an understanding and appreciation for the role of consistent exercise in maintaining good health. The interrelationship of the muscular, cardiovascular, respiratory and digestive systems and the net effect of training on these systems.
15 Class Hours

PED 172 Volleyball (1/2)
A basic course in the fundamentals of power volleyball. Team strategy, history and rules. Drills and competitive play.
4 Class Hours, 12 Laboratory Hours per half semester

PED 173 Fitness Walking (1½)
Fitness Walking is a safe form of aerobic exercise which can be incorporated into one's life style and individual fitness program. Proper shoes and foul weather gear is needed.
9 Class Hours; 36 Laboratory Hours

PED 175 Weight Training (1/2)
Introduction to the Universal Gym as a means of physical conditioning. Components of fitness and principles of training discussed. Several strength building prescriptions presented.
3 Class Hours, 12 Laboratory Hours per half semester

PED 299 Independent Study (1/2 or 1)
Student undertakes a project of own choice with guidance from faculty member.The project is intended for a student who has completed requirements.
Prerequisite: 2 Semester Hours in Physical Education

PHI 102 General Philosophy (3)
This course introduces Philosophy by examining some of its major areas, including Metaphysics (theories concerning the nature of reality), Epistemology (theories concerning the nature of human knowledge). Ethics (theories of morality) and Logic.
3 Class Hours

PHI 103 Philosophy of Mind (3)
Introduction to metaphysical philosophy. examination of the major views of reality: dualism, materialism, idealism. Analysis and discussion of evidence and arguments relating to issues such as "mind," immortality, free will vs. determinism, and the existence of God.
3 Class Hours

PHI 104 Philosophy of Religion (3)
Relation of religion and philosophy and an investigation of different concepts of God. Analysis of religions types and experiences, different attempts to justify religious beliefs. Investigation of the logic of religious experience through an analysis of the leading ideas in the philosophy of religion both as an historical and contemporary phenomenon.
3 Class Hours

PHI 111 Humanities (3)
Critical analysis of human development from the early beginnings to the present state through a thematic investigation of literature, philosophy, history and the arts. Classical, Medieval, Renaissance and Metaphysical Periods.
3 Class Hours

PHI 112 Humanities (3)
Critical analysis of human development from the early beginnings to the present state through a thematic investigation of literature, philosophy, history and the arts. Neoclassical, Romantic, Victorian, Early Modern and Late Modern Periods.
3 Class Hours

PHI 120 Verbal Reasoning (3)
To improve the student's ability in reasoning. Concentration on qualifications, symbols, ambiguity, analysis and semantics.
3 Class Hours

PHI 201 Ethics: Moral Philosophy (3)
Main classical and modern ethical theories, including such theorists as Plato, Aristotle, Mill, Kant, Moore. Comparison and contrast of normative and meta-ethical theories, the good life and how one should act, the meaning of moral judgments and the criteria of validity, justification of moral beliefs and the ground of moral responsibility.
3 Class Hours

PHI 202 Logic (3)
Analysis and practical application of the elements of logic as they apply to thinking on both a linguistic and formal level. Forms of argument, informal and formal fallacies, significance of the emotions on decision making, inductive and deductive processes. symbolizing arguments and formal proofs of validity.
3 Class Hours; Prerequisite: Any PHilosophy (PHI) course or any Mathematics (MAT) course numbered MAT 139 or higher

PHI 203 Philosophical Issues in American Education (3)
An inquiry into educational problems which can be illuminated by philosophical perspectives: educational aims, conceptions of learning, nature of knowledge, ethics of teaching, theories of moral education, school and society, equal educational opportunity, freedom and authority, and curriculum. Philosophical background to educational policy issues of special interest to prospective teachers, but also to individuals (citizens) concerned about public schools.
3 Class Hours

PHI 206 Social and Political Philosophy (3)
A philosophical study of the social/political organization of society through an examination of such topics as justice, authority, leadership, individual rights, and of the relationship between the state and various social institutions, such as family, business, church, and education.
3 Class Hours

PHI 208 Humanities and Technology (3)
An investigation of the interaction of humanities and technology. An examination of the reciprocal impacts of various human values and technology through consideration of these topics: methods of inquiry, communication, life and death, the environment, and robotics and artificial intelligence.
3 Class Hours

PHI 299 Independent Study: Philosophy (1-3)
An individual student project concerned with advanced work in a specific area of philosophy. Conducted under the direction of a faculty member, the independent study is concerned with material beyond the scope and depth of ordinary course.
Prerequisite: 3 semester hours of college level work in philosophy

PHS 111 Physical Science for Today (3)
Beginnings of astronomy, the earth and moon, planets and satellites, the sun and other stars, cosmology, chemistry of our atmosphere, weather and methods of modification, water cycle and pollution. Composition of the earth's crust erosional processes, earthquakes and volcanoes, plate techtonics, humans and their environment. Required field trips supplement classroom experience. Does not meet science requirement for LAAA or LAAS degree.
2 Class Hours, 2 Laboratory Hours

PHS 113 Physical Science — Astronomy (4)
The Copernican and Ptolemaic models of the solar system. The planets, sun, moon and comets. Stellar magnitudes and evolution of stars. The size and age of the universe and modern developments in astronomy and cosmology. Required field trips supplement classroom experience.
3 Class Hours, 3 Laboratory Hours; Prerequisites: MAT 099 or equivalent

PHS 114 Physical Science — Meterology (4)
Principles governing the atmosphere, its composition, structure and behavior;energy transfer and balance; and the changing seasons are presented. Humidity; the formation of dew, fog, and clouds; atmospheric stability and precipitation are examined. Forces that affect the winds and the wind-ocean connection are relayed to the students. The types of air masses and fronts and the process of cyclogenesis is described. Severe weather such as: thunderstorms, lightning, tornadoes, and hurricanes are discussed.
3 Class Hours, 3 Laboratory Hours; Prerequisites: MAT 099 or equivalent

PHS 115 Physical Science — Geology (4)

Minerals, rocks — their structure and identification. Erosion of the crust, its uplifts and deformation. Earthquakes and the interior of the earth, and the physical history of the earth. Plate techtonics and ecology from a geologic viewpoint. Required field trips supplement classroom experience.

3 Class Hours, 3 Laboratory Hours; Prerequisites: MAT 099 or equivalent

PHS 116 Physical Science — Energy and Environment (4)

Basic physical principles and the role of these principles in understanding and appreciating the problems of the environment. Problems of pollution and depletion of natural resources. Application of physics in the everyday world. Required field trips supplement classroom experience.

3 Class Hours, 3 Laboratory Hours; Prerequisites: MAT 099 or equivalent

PHS 215 Physical Science — Historical Geology (4)

Geologic time: catastrophism vs. uniformitarianism, relative and absolute dating, geologic time scale, stratigraphy; environments: ecology, biogeography, marine and nonmarine sedimentary environs; evolution: Lamark, Darwin, speciation, extinction, evolutionary trends; mountain building and sedimentation: ancient and modern analogs; Precambrian: formation of solar system, Archean and Protozoic rocks, atmosphere, cratons, life, Edicara; Paleozoic, Mesozoic and Cenozoic: life, paleogeography, regional examples and extinctions. Required field trips supplement classroom experience.

3 Class Hours, 3 Laboratory Hours; Prerequisites: MAT 099 or equivalent and PHS 115 Physical Science – Geology

PHY 100 Preparatory Physics (4)

Application of basic numerical, algebraic, and trigonometric procedures to the solution of physical problems. Static and dynamic forces. Work, energy, fluid pressure, temperature and heat.

4 Class Hours, Prerequisite: MAT 099 Elementary Algebra or equivalent

PHY 118 Physics for Physical Therapist Assistants (4)

Forces, torques, linear motion, energy, momentum, conservation laws; temperature and heat, temperature scales, heat transfer, changes of state; electric fields, potential difference; Ohm's law, DC circuits, magnetic field, electromagnetic induction, motion of charges in magnetic fields; wave motion, electromagnetic spectrum, atomic structure.

3 Class Hours, 2 Laboratory Hours; Prerequisites: MAT 099 or equivalent

PHY 121 Physics for Radiographers (4)

Motion, conservation laws, the electric field and potential, Ohm's law, DC circuits, the magnetic field, electromagnetic induction, AC circuits, wave motion, electromagnetic waves, atomic structure, production of x-rays, nuclear structure, radioactive decay, interaction of radiation with matter, radiation detection. For Radiologic Technology students.

3 Class Hours, 2 Laboratory Hours; Prerequisites: MAT 099 or equivalent

PHY 141 Physics I (4)

Composition and resolution of vectors, forces in equilibrium, moments of forces, linear and projectile motion, forces and motion, rotation, work and energy, impulse and momentum, elasticity, harmonic motion, fluid mechanics, temperature, thermal expansion, heat. For Engineering Technology students.

3 Class Hours, 2 Laboratory Hours; Corequisite: MAT 161 Pre-Calculus or equivalent

PHY 142 Physics II (4)

Thermodynamics, thermal properties of gases, wave motion, and sound, electrostatics, direct current, magnetism, electromagnetic induction, alternating current, electromagnetic radiation, illumination, reflection and refraction of light, mirrors and lenses, optical instruments, diffraction, nuclear energy. For Engineering Technology students.

3 Class Hours, 2 Laboratory Hours; Prerequisite: PHY 141 Physics

PHY 161 Physics I (4)

Structure and language of physics. Standard units of measurement of length, mass and time. Basic mathematical foundation: elementary trigonometry, vectoralgebra, powers of ten and significant figures. Mechanics: motion, Newton's Law, work, energy and momentum principles, rotation. Properties of matter. Concepts of heat and temperature: kinetic theory; thermodynamics. First course in an introductory non-calculus sequence. For Liberal Arts, Computer Studies and Engineering Technology students who need a Laboratory Science.

3 Class Hours, 3 Laboratory Hours; Prerequisite: MAT 161 Pre-Calculus or equivalent

PHY 162 Physics II (4)

Waves and wave phenomena; mirrors and lenses; optical instruments; sound. Electricity and magnetism — electrostatics, electrical circuits, electromagnetic phenomena. Modern physics = relativity, quantum theory, atomic structure radioactivity. Second half of PHY 161 Physics I.

3 Class Hours, 3 Laboratory Hours; Prerequisite: PHY 161 Physics

PHY 181 Engineering Physics I (4)

Vectors, equilibrium, kinematics, Newton's Law of Motion, centripetal force, work and energy, impulse and momentum, rotation, elasticity, harmonic motion,hydrostatics and hydrodynamics.

3 Class Hours, 2 Laboratory Hours; Corequisites: MAT 181 Calculus I with Analytic Geometry and EGR 100 Orientation

PHY 182 Engineering Physics II (4)

Coulomb's Law, electric field, Gauss' Law, electric potential and energy, capacitance, DC circuits, magnetic induction, magnetic forces and torques, induced EMF, self-inductance, AC circuits, electromagnetic waves.

Prerequisite: PHY 181 Engineering Physics I; Corequisites: MAT 182 Calculus II with Analytic Geometry and EGR 100 Orientation

PHY 281 Engineering Physics III (4)

Temperature, heat transfer, thermodynamics, kinetic theory, waves, sound, geometrical and physical optics, introduction to quantum mechanics, atomic and nuclear physics.

4 Class Hours; Prerequisites: 1 year of Calculus and PHY 182 Physics II or equivalent; Corequisite: EGR 200 Orientation

*PLA 110 Survey of Paralegalism (3)

Role of the paralegal and attorney. Introduction to jurisprudence and functions of administrative agencies. Local, state, federal courts. Introduction to contracts, torts, negligence, criminal procedure, real property law, law office management. Legal terminology.

3 Class Hours

*PLA 120 Advanced Paralegalism (3)

Continuation of law office management. Introduction to research techniques, family law, surrogate, wills and estates, agency and partnership, bankruptcy,corporate law, commercial paper, workman's compensation with procedures and practices of each. Legal terminology.

3 Class Hours

*PLA 200 Real Property Law (3)

Comprehensive survey of law of real property, emphasizing, practical application to a paralegal function. Analysis of form of deeds, bonds, notes,mortgages, assignments, discharges, purchase of contracts, leases, options. Training in searching title, basic understanding of abstracts of title, real property litigation, estates, condemnation and foreclosure.

3 Class Hours; Prerequisite: PLA 110 Survey of Paralegalism or permission of department

*PLA 207W Legal Writing and Research (3)

Development of legal research and drafting skills through use of digests, reporter systems, and other features of law libraries. Analysis of various types of legal documents for clarity, composition, conciseness. Practice in research and drafting of legal documents. Writing Emphasis Course.

3 Class Hours; Prerequisites: PLA 110 Survey of Paralegalism, ENG 110 Written Expression I, and 3 additional credits in PLA or department permission

*PLA 215 Estates, Probates and Trusts (3)

Disposition of descendent's property, law of interstate succession, execution and probate of wills, nature and creation of trusts and the administration of estates and trusts, estate and gift tax preparation.

3 Class Hours; Prerequisite: PLA 110 Survey of Paralegalism or permission of department

*PLA 220 Contracts (3)

The law of contracts, their historical significance, formation, validity interpretation, transfer or contractual rights. Assignment, third party beneficiaries, discharge, breach and remedies. (BUS 118 Business Law I may be substituted.)

3 Class Hours

*PLA 222 Medical Law (3)

General coverage of how legal and medical issues are inter-related, including right to treatment, organ transplant, right to die, abortion issues, medical malpractice, informed consent, insanity defense, surrogate mothers. Lecture and discussion. How these topics affect the role of the attorney and paralegal in servicing client needs.

3 Class Hours

*PLA 225 Family Law (3)

Pleadings relative to general practice of law in relationships to the family unit. Laws relating to marriage, divorce, annulment, custody and support, adoption, name change, guardianship, paternity. Written pleadings and necessary research pertaining to these aspects of family law.

3 Class Hours

*PLA 226 Taxation Law for Paralegals (3)

Principles of federal taxation, analysis of IRS code and related case law, emphasis on law and concepts of taxation, basic and advanced tax law terminology, litigation involving the IRS. Exploration of social changes, and factors involving tax problems, current issues in tax reform, perspective of the paralegal regarding resolution of tax disputes.

3 Class Hours

•All asterisked (*) courses are taught evenings only and when enrollment permits.

*PLA 227 Constitutional Law for Paralegals (3)

The practice of everyday general law as affected by the U.S. Constitution, and the Bill of Rights, with applications to the paralegal function. Issues of contemporary concern including cases of local courts and of the Supreme Court and their implications for law in general and society at large.
3 Class Hours

*PLA 240 Corporate Law (1)

Types, uses and organization of the corporation, antitrust and securities law, mergers and consolidation, liquidation and dissolution.
1 Class Hour - 5 Week Session

*PLA 250 Municipal Law (1)

Structure and operations of local government in New York state. Evolution of local government in New York during the first two centuries of its existence. Laws, ordinances, and operations.
1 Class Hour - 5 Week Session

PLA 251 Federal Civil Procedure (1)

Federal court system, rules of civil procedure including pleading, motions, depositions, litigation procedures and the role of the paralegal.
3 Class Hours - 5 Week Session

PLA 252 Applied Real Estate (1)

Role of the paralegal in Real Estate transactions including agreements, abstracts, preparation of documents, contracts, and closing procedures. Students conduct a "mock" real estate transaction.
3 Class Hours - 5 Week Session

PLA 253 Computers in the Law Office (1)

Computer applications including hardware and software, financial management, word processing, real estate practice packages, computerized research, litigation support, and document management.
3 Class Hours - 5 Week Session

*PLA 260 Labor-Management Relations (Labor Law) (1)

Labor-management relations in the public and private sectors. Taft-Hartley Act, National Labor Relations Act and Wagner Act, unfair labor practices, labor contracts, arbitration and mediation, availability of injunctions in labor disputes.
1 Class Hour - 5 Week Session

*PLA 270 Vehicle and Traffic Law (1)

Regulations of traffic within the state of New York. Emphasis on violations and traffic-related misdemeanors resulting from violation of the rules of the road and court proceedings resulting therefrom.
1 Class Hour - 5 Week Session

*PLA 280 Litigation and Trial Preparation (1)

Intake procedure, systems and analysis, concepts of jurisdiction and venue, parties to an action, pleadings, pre-trial procedures, motions and special practice, special proceedings, trials, judgments and appeals.
1 Class Hour - 5 Week Session

*PLA 290 Landlord-Tenant Relations (1)

Problems faced by landlords and tenants, private housing, live-in arrangements, covenants, leases, warranties. Tenant and landlord rights and obligations.
1 Class Hour - 5 Week Session

PLA 295 Paralegal Practicum (4)

Designed for students without previous exposure to the legal field to observe and study operations, policies, and procedures performed by paralegals in various settings, (private firms, public agencies, commercial corporations, etc.). Emphasis on attorneys and paralegals interaction and paralegal relations with areas outside the office (clients, municipal agencies, other firms, commercial institutions, other legal agencies, etc.). Final report integrating the practical and theoretical aspects of their experiences.
2 Class Hours and 4 Laboratory Hours; Prerequisites: 30 credits of counseled coursework, at least 12 of which must be in PLA credits or permission of department chairperson.

*PLA 299 Independent Study: Paralegal (1-3)

An individual student project in paralegal studies which is beyond the scope or requirements of the courses offered by the program. Conducted under the direction of a faculty member or attorney, and approved by the program coordinator.
Prerequisite: PLA Survey of Paralegalism plus three additional hours in a 200 level PLA course

POS 201 Introduction to American Government (3)

American political institutions, processes and behavior. The relationships among cultural, legal and social aspects of the political system. Structure, organization and function of political parties, pressure groups and mass media. Application to contemporary issues and events.
3 Class Hours

POS 204 American State and Local Government (3)

Theory and practice of state and local government, utilizing a problem- solving or "policy" approach. Students are encouraged to explore in depth the workings of city and county governments locally.
3 Class Hours

POS 299 Independent Study (1-3)

An independent student project which is beyond the scope of courses currently offered by the department, directed by a faculty member with approval of the department chairperson.
Prerequisite: 3 Semester hours of political science

PSY 100 Psychology of Personal Adjustment (3)

Investigation of bio-social factors which influence human behavior with emphasis on: (1) development of physical, mental, emotional, social and spiritual well-being; (2) personal responsibility for one's lifestyle and the consequences that flow from one's choices. (This course cannot be used as a prerequisite for other psychology courses.)
3 Class Hours

PSY 110 General Psychology (3)

Definition and description of psychology. Topics may include functions of neural system, sensation and perception, learning, memory, motivation, emotion, conflict and frustration, personality, social psychology. Methods and statistical applications, history and fields of psychology.
3 Class Hours

PSY 210 Developmental Psychology (3)

Human development from infancy through childhood, adolescence, and adulthood. Intellectual growth, personal and social adjustment, the relationship between physical and mental development, and typical problems in various states of the life-cycle are considered. Especially for Nursing students.
3 Class Hours Prerequisite: PSY 110 General Psychology

PSY 211 Child Development (3)

The growth, maturation and development of children, including mental and motor phases, learning, motivation and personality formation.
3 class Hours; Prerequisite: PSY 110 General Psychology

PSY 212 Adolescent Development (3)

The developmental tasks of the adolescent years, influence of people and institutions on self-concept. Physical, psychological, intellectual effects and intellectual growth.
3 Class Hours; Prerequisite: PSY 110 General Psychology

PSY 214 Abnormal Psychology (3)

Survey of the normal and abnormal personality with special emphasis on certain causal factors pertaining to maladaptive behavior. A general framework for understanding abnormal behavior patterns, including common misconceptions, accepted definitions, and the classification of mental disorders.
3 Class Hours; Prerequisite: PSY 110 General Psychology

PSY 217 Introduction to Counseling Theory and Practice (3)

Varied methods of counseling, employing current theories, situational examples and means for determination of method to be used. Practical cases in social sciences, clinics, hospitals, and educational institutions. Overall training and personality of the counselor.
3 Class Hours; Prerequisite: PSY 110 General Psychology

PSY 223 Intelligence and the Mentally Retarded (3)

An introduction to the major areas of atypical social, emotional and cognitive development. Attention will be focused on the problems, etiologies and expectancies of the social and/or emotional maladjustments and the cognitive atypicalities (Learning Disabilities, Mental Retardation, Savants, etc.) Special consideration will be given to intelligence testing and the educational, social, legal and placement needs of the atypical individual.
3 Class Hours; Prerequisite: PSY 110 General Psychology

PSY 227 Behavior Modification (3)

Principles of behavior modification using classical and operant techniques. Practical applications of these principles to the fields of child care, psychotherapy and correctional institutions.
3 Class Hours; Prerequisite: PSY 110 General Psychology

PSY 299 Independent Study (1-3)

An individual student project in psychology which is beyond the scope or requirements of the courses offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.
Prerequisites: PSY 110 General Psychology plus 3 additional hours in a 200 level PSY course

PTA 100 Introduction to Physical Therapy I (3)

The history and development of medicine is outlined. The profession of physical therapy is presented with emphasis on the definition of the role and education of the physical therapist assistant. Students acquire basic knowledge of medical terminology, health care institutional organization, ethics, medical-legal aspects of patient care, and fiscal considerations involved. Interpersonal skills and professional/patient interactions are discussed. General concepts of disease and disease processes are introduced. Diseases of selected organ systems are studied.
3 Class Hours; Corequisite: BIO 131

• All asterisked (*) courses are taught evenings only and when enrollment permits.

PTA 101 Introduction to Physical Therapy II (3)

This course is a continuation of PTA 100. Interpersonal skills and professional/patient interactions are discussed. Diseases of selected organ systems are studied.

3 Class Hours; Prerequisite: PTA 100; Corequisite: BIO 132

PTA 102 Introduction to Rehabilitation (4)

The principles of normal body alignment, body mechanics, posture, balance and movement are presented. Bed positioning, moving and lifting the dependent patient are discussed and demonstrated. Goniometrics, transfer and elevation activities, passive and self range of motion exercises are practiced. The therapeutic gymnasium, wheelchairs and assistive devices are introduced. Architectural barriers are explored. The rehabilitation of the patient with spinal cord injury, cerebrovascular accident and amputation is studied.

6 Class Hours; Prerequisites: PTA 100, BIO 131, PHY 118

PTA 103 Physical Agents and Massage (4)

Basic principles of massage and application of modalities are presented. Specific skills practiced in the laboratory include various massage techniques; use of hot and cold packs, paraffin application; use of whirlpool and contrast baths; use of ultrasound; application of microwave diathermy; use of electrical stimulation; and ultraviolet and infrared radiation therapy techniques. Principles and procedures related to the use of the Hubbard tank, therapeutic pool and intermittent compression are also discussed.

6 Class Hours; Prerequisites: PTA 100, BIO 131, PHY 118; Corequisite: PTA 101

PTA 105 Certified First Responder Course (1½)

This course uses the curriculum approved by the NYS Department of Health for Certified First Responder (FR). The FR provides initial assessment and resuscitative care to a victim until personnel qualified to provide basic or advanced life support arrive on the scene. Core material develops a knowledge and skills base in the areas of patient assessment/vital signs, cardiopulmonary resuscitation, airway adjuncts and hemorrhage control. The second section provides an orientation to trauma care and medical emergencies including knowledge and skill in the handling of victims with suspected spinal cord injury, altered mental status, chest pain, breathing difficulty, and emergency childbirth. Students must successfully complete the NYS-EMS final practical examination for First Responder. Course meets daily after end of Spring Semester for 5 days.

40 Class Hours Prerequisite: BIO 132 and permission of Department.

PTA 110 Clinical Affiliation I (2)

This course constitutes the student's first clinical affiliation assignment. The student spends three to five work days in one health care facility working under the supervision of a physical therapist. The student is assigned to work with patients requiring treatments with which the student is familiar including simple modalities, simple exercise routines, ambulation and activities of daily living. The student meets with the clinical coordinator several times during the five-week period to assess progress.

90 Clinical Hours over 3-6 weeks; Prerequisites: PTA 101, 102, 103, 105

PTA 201 Kinesiology (4)

Muscle structure and function are reviewed. Normal human motion is studied. Manual Muscle Testing is studied in the laboratory. Posture and normal gait are reviewed. Pathological gait patterns are presented and analyzed.

6 Class Hours; Prerequisite: BIO 132, PHY 118, PTA 102; Corequisite: PTA 202

PTA 202 Therapeutic Exercise (4)

The principles and techniques of therapeutic exercise are presented. Specific neurological, medical, surgical and orthopedic conditions are studied. Chest physical therapy including postural drainage is practiced.

6 Class Hours; Prerequisites: PTA 101, BIO 132, PHY 118; Corequisite: PTA 201

PTA 210 Clinical Affiliation II (4)

This course constitutes the student's second clinical affiliation assignment. The student spends two days in one health care facility working under the supervision of a physical therapist. The student is assigned to work with patients requiring treatments with which the student is familiar including simple modalities, simple exercise routines, ambulation and activities of daily living. The student is also introduced to the patient requiring therapeutic exercise routines which are part of the student's concurrent course work. The student meets with the clinical coordinator during the fifteen-week period to assess progress.

180 Clinical Hours during 15 weeks; Prerequisite: PTA 110; Corequisite: PTA 201, 202

PTA 213 Senior Seminar I (5)

Additional neurological, orthopedic, medical and surgical conditions are presented. Basic principles of testing and complex treatment procedures are included so that the student understands and is aware of how to assist the Physical Therapist. Additional psychosocial issues are also discussed. This course is presented in a seminar format of two to four-hour segments for the first 7 weeks of the semester.

SPECIAL CONSIDERATIONS: This course may be presented by guest lecturers and sessions may be held off campus in various health care facilities depending upon the particular topic. Significant preparation time outside of regular class hours is required.

75 Class Hours during 7 weeks; Prerequisites: PTA 201, 202, 210

PTA 220 Clinical Affiliation III (6)

This course constitutes the student's final clinical affiliation assignment. The student works full-time in one health care facility for a period of six weeks under the supervision of a physical therapist. The student is assigned to work with all types of patients requiring treatments with which the student is familiar including all modalities, exercise routines, gait training and activities of daily living. The student meets with the clinical coordinator several times during the six-week period to assess progress.

240 Clinical Hours during 6 weeks; Prerequisites: PTA 210, 213

PTA 224 Senior Seminar II (1)

This final course of the student's academic career is designed to allow students to integrate their theoretical knowledge and their clinical experience. Students meet in seminar format and present case studies based on their clinical experience. If time permits special topics are presented and discussed. In addition a student/teacher conference is required for each student prior to graduation. Course meets three hours per day, three days per week during final two weeks of the semester.

9 Class Hours for 2 weeks; Prerequisites: PTA 213, 220

PTA 299 Independent Study (1-4)

Course content covering advanced work in Physical Therapist Assistance on which the instructor and student agree. The material is beyond the scope of an ordinary course and it must be approved by the department chairperson. Conducted under the direction of a faculty member.

Prerequisite: Department approval

RAD 100 Introduction to Radiologic Technology (3)

Overview of radiologic technology through the study of its historical development, its placement in the medical field today, the organization of a modern radiology department, radiation protection, professional ethics, medicolegal aspects of radiology, medical terminology and math for radiographers.

3 Class Hours

RAD 101 Radiologic Technology I (3)

Introduction to the basic principles of radiographic imaging including recording media, processing methods, radiographic quality and radiographic accessories. Lecture and laboratory are coordinated to enhance these fundamental concepts.

3 Class Hours, 1 Laboratory Hour

RAD 102 Radiologic Technology II (3)

Advanced study of the factors contributing to the radiographic image. Writing Emphasis Course.

3 Class Hours, 1 Laboratory Hour; Prerequisite: RAD 101 Radiologic Technology I or permission of instructor

RAD 103 Positioning I (2)

Instruction and practice in radiographic positioning or the appendicular skeleton.

6 Laboratory Hours

RAD 104 Positioning II (1)

Instruction and practice in radiographic positioning of the axial skeleton.

3 Laboratory Hours; Prerequisite: RAD 131 Clinical Education I

RAD 110 Methods of Patient Care (1)

Patient care procedures routinely performed in the radiology department.

1 Class Hour, 1 Laboratory Hour

RAD 131 Clinical Education I (Winterim) (0)

Introduction and orientation to the radiology department in an affiliated hospital. (Successful achievement is a graduation requirement.)

2 Weeks of instruction: Prerequisites: BIO 131 Human Biology I and RAD 100 Introduction to Radiologic Technology, RED 103 Positioning I and RAD 110 Methods of Patient Care or permission of instructor

RAD 132 Clinical Education II (2)

Observation and clinical experience for the development of competency involving elementary radiographic procedures in an affiliated hospital

16 Laboratory Hours; Prerequisite: RAD 131 Clinical Education (Winterim) or permission of instructor

RAD 133 Clinical Education III (Summer Term I) (3)

Clinical experience for development of competency involving general radiographic procedures in an affiliated hospital.

40 Laboratory Hours; Prerequisites: RAD 132 Clinical Education II and BIO 132 Human Biology II or permission of instructor

RAD 201 Radiologic Technology III (3)

Principles and operation of radiographic imaging equipment, including x-ray tubes, tomography, mobile units, fluoroscopy television and digital radiography.
3 Class Hours; Prerequisites: PHY 121 Physics for Radiographers and RAD 102 Radiologic Technology II or permission of instructor

RAD 204 Advanced Positioning (1)

Instruction and practice in positioning techniques involving the skull, facial bones, and advanced radiographic procedures.
3 Laboratory Hours; Prerequisite: RAD 133 Clinical Education III or permission of instructor

RAD 216 Imaging Modalities (1)

Introduction to the principles of computerized axial tomography, nuclear medicine, magnetic resonance imaging, and ultrasound.
1 Class Hour; Prerequisite: RAD 201 Radiologic Technology III or permission of instructor

RAD 220 Radiologic Pathology (2)

A presentation of the various medical and surgical diseases and their relationship to radiographic procedures.
2 Class Hours; Prerequisite: BIO 132 Human Biology II or permission of instructor

RAD 225 Special Radiographic Procedures (3)

Introduction to radiographic examinations involving surgical procedures and specialized equipment. Writing Emphasis Course.
3 Class Hours; Prerequisite: RAD 230 Clinical Education IV or permission of instructor

RAD 230 Clinical Education IV (2)

Practical application of advanced positioning techniques with emphasis on the skull and facial bones.
16 Laboratory Hours; Prerequisite: RAD 133 Clinical Education III (Summer) or permission of instructor

RAD 231 Clinical Education V (Winterim II) (0)

Clinical assignment devoted to the application of radiographic procedures under direct supervision in a cooperating hospital. (Successful achievement is a graduation requirement.)
2 Weeks of instruction; Prerequisite: RAD 230 Clinical Education IV or permission of instructor

RAD 232 Clinical Education VI (3)

Practical application of advanced radiographic procedures under direct supervision in an affiliated hospital.
24 Laboratory Hours; Prerequisite: RAD 231 clinical Education V (Winterim) or permission of instructor

RAD 233 Clinical Education VII (Summer Term II) (3)

Clinical experience for the development of competency.
40 Laboratory Hours

RAD 245 Radiobiology (2)

Radiobiology and advanced radiation protection procedures related to diagnostic and therapeutic uses of radiation.
2 Class Hours; Prerequisite: RAD 201 Radiologic Technology III or permission of instructor

RAD 250 Image Assessment (2)

The basic principles and techniques of quality assurance testing presented and illustrated through laboratory experiments. Major emphasis on the tests and measurements used to analyze imaging systems with minimum information loss.
2 Class Hours, 1 Laboratory Hour; Prerequisite: RAD 210 Radiologic Physics or permission of instructor

RAD 295 Seminar in Radiography (2)

Preparation of the technical report and its organization for both written and oral presentation. Readings in current literature and journals.
2 Class Hours; Prerequisite: Senior Year Status

RAD 299 Independent Study (1-3)

An individual student project concerned with advanced work in a specific area of radiography. Independent study is concerned with material beyond the scope and depth of courses currently offered by the department. Conducted under the direction of a faculty member.
Prerequisite: Department Chairperson approval

RDG 090 Reading Fundamentals (0)

A non-credit course involving individual diagnosis of student's reading strengths and weaknesses, and development and implementation of program to upgrade basic skills. Content to vary with individual student.
4 Class Hours

RDG 092 College Preparatory Reading (0)

An individualized course emphasizing vocabulary expansion, inferential and critical comprehension, and flexible rate. Instruction and practice of reading skills to specific content areas.
4 Class Hours

RDG 094 College Vocabulary Skills (0)

Designed to provide students with several methods of mastering vocabulary encountered in college courses. Students will review dictionary skills. Learn to infer meanings from context, structural analysis, and methods of studying vocabulary for examinations. In-class practice will be designed to fit students' individual needs.
2 Class Hours for 8 Weeks

RDG 110 Efficient Reading (1)

Development of skills characteristic of the mature reader. Examination of structure of material, emphasis on identification of purpose, flexibility of rate.
2 Class Hours for 10 Weeks; Course starts at beginning of third week of semester

RDG 120 Critical Reading (3)

Emphasis is on critical reading and thinking skills. Students will analyze and evaluate college level readings beyond the literal level. Critical thinking skills will also be applied to the mastery of content area text material.
3 Class Hours

RUS 101/102 Beginning Russian I & II (4)

Basic principles of grammar and syntax. Reading and discussion of graded literary and cultural texts.
4 Class Hours, l Laboratory Hour

RUS 201 Intermediate Russian I (3)

Review of grammar and its application to spoken and written Russian. Reading of literary and cultural texts.
3 Class Hours

RUS 202 Intermediate Russian II (3)

Continuation of RUS 201.
3 Class Hours

SAC 101 The Individual in a Changing Environment (3)

Individual interaction and reading designed to foster understanding and application of psychological and emotional growth within the many environments we are part of. Basic class material is the individual and group analysis of student's experience within an immediate unstructured setting. Focus on analysis and organization of experience into a personally rewarding conception of growth. Individual self-development projects outside the class.
3 Class Hours

SAC 110 Orientation for International Students (2)

An orientation course for international students designed to aid in their adjustment as students at Broome Community College. Study skills, academic regulations, the American educational system, individual educational and vocational goals, American customs. Especially intended for students during their initial semester of enrollment in conjunction with English-as-a-Second-Language course offerings, such as ESL 103, 104, 106. (This course is not acceptable for credits toward a degree.)
2 Class Hours

SAC 250 Career Exploration (3)

How to plan, establish, change a career. The process of deciding on a career and implementing career goals, assessment of values, interests and skills plus their relationship to occupations. Analysis of the labor market needs, identification of employers and sources of occupation information, the means of securing employment through proposals, resumes, applications and job interviews. Supportive small group atmosphere. Class activities include discussion, speakers, testing, and individual counseling within career development theory.
3 Class Hours

SAC 251 Career Search (1)

For people who know their interests, skills, and values but are not sure which career field or lifestyles would be most satisfying to them. Sources of occupational information, analysis of labor market needs, what colleges and college majors best prepare students for their career goals. For students who are beginning a career, changing careers, or returning to the job market. For students who scored 13-18 on My Vocational Situation. Supporting small group atmosphere. Discussion sessions, speakers, testing field work, and individual counseling.
2 Seminar Hours

SAC 295 Seminar in Human Potential (3)

Human Potential seminar centers on the person within a positive group setting while working on and with the potential of all involved. It assists persons in achieving the following: becoming more self-directed, self-motivating, self-aware, self-controlled, self-disciplined and empathetic toward others. The focus is on developing the person's own resources by utilizing specific and structured procedures.
3 Class Hours

SOC 110 Introduction to Sociology (3)

Sociological facts and principles dealing with the scientific study of human relationships. Emphasis on analysis and study of culture and human society, socialization, groups and group structures. Satisfaction, collective behavioral patterns and the concept of social institutions. Initial experiences for students who desire an introduction to the sociological perspective.
3 Class Hours

SOC 111 Social Problems (3)

The sociology of social and urban problems. Topics may include crime, population, inequality, discrimination, mental illness, attitudes toward work, social control and the dynamics of social change. Students should be aware that individual instructors approach these problems in different ways, depending on students' and instructors' interests. SOC 110 Introduction to Sociology is recommended as an initial experience.
3 Class Hours

SOC 210 Crime and Deviant Behavior (3)

The theoretical aspects of deviance as crime, variations in crime rates, the social and psychological causes of crime, other deviant behavior and the salient research discoveries in these areas. Specific areas within criminology will be reviewed from a multidisciplinary approach to permit as broad an understanding of the problem as possible.
3 Class Hours; Prerequisite: SOC 110 Introduction to Sociology, SOC 111 Social Problems or instructor's permission

SOC 230 The Family/Marriage and Its Alternatives (3)

Social and personal factors which make for adequate family functioning, the forms the family takes, its internal processes and the functions it serves in society. Covers systematically the important theoretical and experimental ground on those issues relevant to both the scholarly and practice-minded student.
3 Class Hours; Prerequisite: SOC 110 Introduction to Sociology

SOC 234 Sociology of Chemical Dependency (3)

Examines the social issues and problems of chemical dependency in American society. Legal and illegal substances, the causes of substance abuse, and alternatives will be examined.

SOC 250 Introduction to Social Work (3)

Social work as a profession in the context of the social welfare institution;historical and philosophical roots of social work and social welfare; attributes of the social work role; social workers' knowledge base; fields of social work practice.
3 Class Hours; Prerequisites: SOC 110 Introduction to Sociology and PSY 110 General Psychology

SOC 299 Independent Study (1-3)

An individual student project in sociology which is beyond the scope or requirements of the courses offered by the department, conducted under the direction of a faculty member and approved by the department chairperson.
Prerequisite: 3 Semester Hours in Sociology

SOS 111 Public Affairs (3)

Contemporary problems examined in the context of American democratic social and political beliefs and practices. Meaning of liberty, equality, individualism, justice, and civic obligation. Proposals for problem solving via "public policy."
3 Class Hours

SOS 120 Science Technology and Society (3)

A study of the interaction of the forces of science and technology with contemporary society, such as government, industry, family, education and organized religion. In addition, students examine the major views (utopian optimist vs. dystopian pessimist) on our contemporary scientific technology. Examines such current topics as recombinant DNA research, computers, nuclear weapons, nuclear power, Star Wars, etc.

SOS 126 War, Peace and a Just World Order: Honors Seminar (3)

Is war the product of our nature or our nurture? Is the war system an inherent part of the nation state system? Can war be controlled or eliminated in the existing world? If not, on what shape and form will a new world have to be based? How will it be brought into being? These questions and related issues will be addressed as we ponder the prospect of war, peace and a just world order as humanity enters the 21st century.
3 Class Hours

SOS 130 Man, Technology and Environment (3)

Biological, economic, and political dimensions of the environmental crises. The conditions created by population growth, a rising standard of living, the increased demand on natural resources, and the advance of technology. Alternative strategies to deal with pollution and energy problems.
3 Class Hours

SOS 145 Sex and Gender (3)

Social, psychological and biological determinants of femaleness and maleness, and femininity and masculinity. Sociological, psychological, economic, political and physical causes of sexism. Relationship to cultural evolution.
3 Class Hours

SOS 150 Introduction to Human Service Work (6*)

Treatment modalities, goal planning facility usage, counseling, helping skills, principles of human development, etiology, normalization, detection. Institutionalization effects, empathy training, evaluation, problem solving transactional skills, theoretical systems, ethical issues. Psychoactive drugs, habilitative and rehabilitative programs, community services.

*Credit available only to those who complete successfully a certified institution-based training program and credit is only applicable toward the Associate in Science degree in the Liberal Arts Division's Mental Health and Retardation Emphasis. Credit cannot be used to fulfill other social science requirements.

SOS 155 Media and Society (3)

An in-depth examination and analysis of the impacts and effects of the mass media upon society and the converse societal influences upon the media. Includes such issues as media concentration, portrayal of violence, stereotyping, the public's right to know, among others.
Prerequisite: COM 100 or SOC 110

SOS 225H Post-Industrial Civilization: Honors Seminar (3)

Study of the planet as an independent unit facing the challenge of survival with hemispheric differences between "post-industrialized" and "non-industrialized" societies. Interconnections between economic, political, social systems with varying values and traditions. Major works in studies of the future examined for possible answers to such basic survival questions as problems of population, production and distribution of food, energy and other essential resources,ultimate difficulties of pollution and waste disposal.
4 Class Hours

SOS 275 Community Internship (3)

For qualified students a work experience in the professional field in which they plan to major, as they intern in Broome County Government or non-profit human services agencies.
1 Class Hour, 8 Practicum Hours; Prerequisites: Application, interview, and a "B" average.

SOS 290 Social Science Field Experience (3)

Each student spends a minimum of 90 hours working in the community. Periodic meetings, outside reading, and written reports are required. During the meetings, agency functions and goals will be discussed and analyzed.
1 Class Hour; Prerequisite: 6 Credit hours in psychology or sociology plus completion of a concurrent enrollment in 3 additional credit hours in either of these areas.

SPA 101, 102 Beginning Spanish (4, 4)

This is the first half of a comprehension-based foundation course. Special emphasis is placed on the development of listening comprehension. Reading, writing and speaking skills emerge through practice in and out of class.
4 Class Hours; 1 Laboratory Hour; Prerequisite: SPA 101 Beginning Spanish for SPA 102

SPA 201 Intermediate Spanish I (3)

First course in a cultural, conversational and literary approach to the Spanish language. Review and continuation of grammar and syntax will be emphasized through writing, reading and conversation on Spanish and Latin American literary works of recognized authors.
3 Class Hours; 1 Laboratory Hour; Prerequisite: SPA 102 Beginning Spanish

SPA 202 Intermediate Spanish II (3)

Second course of a cultural, conversational and literary approach to Spanish language. Students will have the opportunity to discuss and analyze a wide variety of topics, while reviewing and continuing to explore the grammar and syntax of the Spanish language.
3 Class Hours; Prerequisite: SPA 201 Intermediate Spanish I

SPA 203 Spanish in Conversation (3)

This conversational class will intensively emphasize oral practice in the classroom through a wide variety of topics.
3 Class Hours; 1 Laboratory Hour; Prerequisite: SPA 202 Intermediate Spanish II or its equivalent

SPA 204 Spanish in Conversation and Composition through Literary Works (3)

The Spanish language in conversation and basic composition practice through the reading of various literary works. Classroom discussion and conversation based on these texts.
3 Class Hours; 1 Laboratory Hour; Prerequisite: SPA 203 Spanish in Conversation

SPK 102 Effective Speaking (3)

Speech communication through voice, words, and action. Voice production, diction, platform presence. Organization of ideas. Practice in presenting speeches of different types.
3 Class Hours

SPK 203 Advanced Speaking (3)

Designed so students can review what they have learned in SPK 102 Effective Speaking, learn advanced techniques for informative and persuasive speaking, learn techniques for special speaking occasions. Involvement in a debate as a means of perfecting research techniques, impromptu speaking skills and the processes of logical thinking and organizing.
3 Class Hours; Prerequisite: SPK 102 Effective Speaking

SPK 299 Independent Study: Speech (1-3)

An individual student project concerned with advanced work in a specific area of speech. Conducted under the directions of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.

Prerequisite: 3 Semester hours of college level work in Speech

SQC 110 Total Quality Control (3)

A study of the overall aspects of quality control. The statistical as well as other tools for the planning and regulation of manufacturing process is discussed. The Historical background and the philosophies of key leaders in the field are studied. Vendor and customer relations are studied. Current topics in product design, JIT, Quality Function Deployment and Taguchi techniques are investigated. Process control and process capability are presented.

3 Class Hours; Prerequisite: MAT 124 Statistics I

SQC 111 Acceptance Sampling (3)

A thorough study of acceptance sampling techniques for attributes and variables. Operating Characteristic curves, Lot-by-Lot acceptance plans basedon LTPD, AOQL and AQL. Dodge-Romig, MIL-STD 105D, Sequential Probability Ratio Test (SPRT) Sequential Sampling, Continuous Sampling, MIL-STD 414.

3 Class Hours; Prerequisite: MAT 124 Statistics I

SQC 112 Metrology (3)

The study of the science of measurement. This course will deal with the principles and practice of precision measurement. Topics include fixed gages,micrometers, verniers, thread gaging, comparison measurement, optical measuring instruments, calibration and angle measurement.

3 Class Hours; Prerequisite: MAT 124 Statistics I or MAT 139 Algebra

SQC 113 Statistical Process Control (3)

A thorough study of Process Capability Analysis and Control chart procedures. Capability Indices, Control Charts for attributes, p, np, c, u, d. Control charts for variables $\bar{x}$, R, s, Cusum charts. Distinctions made between process capability and process control.

Prerequisite: MAT 124 Statistics I

SQC 244 Reliability and Life Testing (3)

Fundamentals of Probability, Probability Distribution, Discrete Distributions: Binomial, Hypergeometric, Poisson, Pascal, Continuous Distributions: Normal, Exponential, Gamma, Weibull, Introduction to Reliability, Failure Rate, MTBF, MTTF, Mean Life, Probability of survival for series and parallel redundancy systems, basics of life testing, based on preassigned number of failures, preassigned line, SPRT, maintainability and MTTR.

3 Class Hours; Prerequisite: MAT 124 Statistics I

TAE 101 Principles and Practice of Food Service I (3)

Lecture and laboratory course work on basic food preparation, baking, food service sanitation, kitchen etiquette and supervision. Instruction on production and preparation techniques. Uniform required.

1 Class Hour, 6 Laboratory Hours; Prerequisite: BUS 112 Pre- or Co-requisite: TAE 110

TAE 102 Travel and Tourism I (3)

Major tourist destinations of the world and their culture, attractions, language, currency and flag carriers. An introduction to the American Airlines SABRE system.

3 Class Hours

TAE 103 Front Office Management (3)

A study of the structure of the front office operation as it relates to the hotel/restaurant organization: guest service, reservation and registration procedures, rate structures, cashiering, billing and night audit principles.

3 Class Hours; Prerequisite: BUS 100

TAE 105 Front of the House Management (3)

A study of the management network of the Front of the House as it relates to guest relations, staffing, reservations and the Back of the House personnel. Also covered will be the major types of Table Service, Dining Room Etiquette, Mixology, Wine Tasting and a study of the Wine Regions. Uniform required.

3 Class Hours

TAE 110 Sanitation Management (1)

A course in the fundamentals of restaurant and hotel organization and sanitation. In this certification course the student will learn the control points in food service, the importance of sanitation, and safety procedures.

1 Class Hour

TAE 113 Introduction to SABRE Automation (3)

This course will introduce the American Airlines SABRE System to those students who have no previous computer training, or who would like a refresher course. It will include the building of the passenger name record and other features of the system such as pricing, seat assignment, cars and hotels.

3 Class Hours

TAE 117 Travel and Tourism II (3)

The history and growth of tourism including a comprehensive study of travel and tourism suppliers. Domestic and international air and rail travel, cruise, car rental, hotel and tour package suppliers will be analyzed. Lessons on the SABRE system will continue.

3 Class Hours; Prerequisite: TAE 102

TAE 206 Supervisory Housekeeping and Property Management (3)

This course is a study of the chain of command in a Hotel and/or a Restaurant facility detailing the function and responsibilities of each position in the organizational structure and their importance to successful management. The topics include maintenance, care and control of furnishings, safety, fire prevention, sanitation principles, and proper training of personnel.

3 Class Hours

TAE 207 Hospitality Principles (3)

This course is a study of growth and development of the future of the Hotel/Restaurant Hospitality Industry and the potential for employment in the various segments of the Industry. This course will provide an orientation to future managers on how to be problem solvers by studying the current trends and conditions and relating them to future decisions.

3 Class Hours

TAE 208 Hotel and Restaurant Law (3)

A study of the legal principles governing hospitality operations including: common law, contracts, Laws of Tort and Negligence, hotel-guest relationship, laws regarding food, food service and alcoholic beverages and employment laws.

3 Class Hours; Prerequisite: BUS 118

TAE 212 Hotel/Motel Marketing & Advertising (3)

Application of marketing related to the formation of a mission statement, situational analysis, marketing plans, image and positioning, public relations, promotions and advertising.

3 Class Hours; Prerequisite: BUS 141

TAE 217 Travel and Tourism III (3)

The principles of travel industry documentation, ticketing and tariffs. Students will learn to work with travel-related reference materials and build a PNR on the SABRE reservation system.

Prerequisite: TAE 102, TAE 117

TAE 242 Sales Promotion and Convention Service (3)

This course will present the basic principles and procedures of Hotel and Restaurant Sales as it relates to the convention and group business industry. The following areas will be addressed: facilities, customers, services, competition, sales presentations, advertising methods, staffing and location.

3 Class Hours; Prerequisite: TAE 212

TAE 256 Banquets and Catering (3)

A laboratory/lecture course in which teams of students will be given practice, under supervision, in planning, ordering, and executing complete menus for various functions. This course includes various styles of Off-Premise and On-Premise catering. Emphasis on nutritional and International food. Uniform required.

2 Class Hours, 3 Laboratory Hours; Prerequisite: TAE 101, TAE 110

TAE 265 Food, Beverage and Labor Costs (3)

A study of the principles of cost controls essential to an effective hotel and restaurant operation through an application of food, beverage and labor control procedures as they apply to menu management.

3 Class Hours; Prerequisite: BUS 100, BUS 112 and TAE 101

TAE 291 Travel and Tourism IV (3)

A detailed analysis of traveler-tourist characteristics, psychographics, and the sales and marketing skills needed to understand the interrelationships between traveler need-desire and travel fulfillment. Emphasis on communication skills and application of previous travel courses. Advanced SABRE also will be covered.

3 Class Hours; Prerequisites: TAE 102, TAE 117 and TAE 217

TAE 298A Travel and Tourism Internship (3)

Career-related employment in area travel agencies, hotels, restaurants, car rental companies and airlines for students in The Travel and Tourism program.

TAE 298C Restaurant Internship (3)

Career-related employment in area restaurants for the students in the Restaurant Management program. The intern will experience the opportunity to apply the theory learned in the program within the restaurant setting. Senior status required.

TAE 298D Hotel Internship (3)

Career-related employment in area hotels for students in the Hotel Management program. The intern will experience the opportunity to apply the theory learned in the program within the hotel setting. Senior status required.

THR 101 Theater Appreciation (3)

Art of the theater to increase understanding and appreciation of drama. A cultural approach considering the interrelationship of all aspects of production including plays, acting, directing, costume, make-up and lighting.Attendance at local productions. (Students taking this course may also be interested in LIT 230 American Drama, LIT 233 World Drama.)

3 Class Hours

THR 109, 110 Practicum in Theater Design and Technology (3, 3)

Stage design (both lighting and scenic) and construction techniques are studied first hand, as students participate in actual production of two playseach semester. Problems encountered during a production are analyzed. Individualized instruction is increased as students begin to focus on their particular areas of interest.

3 Class Hours each

THR 111 Acting: External Style (3)

Fundamental acting techniques. Development of individual skills and disciplines relative to external acting techniques. Use of face, voice and movement.

3 Class Hours

THR 112 Acting: Internal Style (3)

Intensive application of acting techniques through scene study and performance. Problems of character analysis, internal acting and style.

3 Class Hours

THR 117 Creative Dramatics (3)

Fundamentals of creative dramatics, its use in teaching, recreation and rehabilitation. Introduction to techniques used and practical application opportunities.

3 Class Hours

THR 121 Make-up for TV and Film (1)

Use of prosthetics and cosmetics. Techniques of executing age, character, and stylistic effects. Students to provide pertinent materials.

2 Studio Hours

THR 140 Presentation for Radio/TV (3)

Presentation as on-air personality. Development of visual and vocal techniques relating to presentation of news, interviews, commercials and announcements.

3 Class Hours

THR 151 Theater Production I (3)

Classroom and workshop study relative to production of plays, including historical and dramatic perspective. Script analysis, play selection, audience research, publicity, administration of a theater.

3 Class Hours

THR 152 Theater Production II (3)

Classroom and workshop for stage production. Special attention to stage management, operation of stage crews, house management. Coordination of visiting and touring theater companies regarding production and logistics.

3 Class Hours; Prerequisite: THR 151 Theater Production I

THR 161 Playwriting (3)

Scriptwriting for the theatre. Attention to style, editing, and suitability for performance.

3 Lecture Hours; Prerequisite: ENG 110 and any THR course

THR 165 Dance for Actors I (1)

Basic dance techniques, dance characterization, and movement relative to performance in musical theatre.

2 Studio Hours

THR 175 Dance for Actors II (1)

Intensive dance techniques, dance characterization, and movement relative to performance in musical theatre.

2 Studio Hours

THR 190 Broome Community College Theater (1)

Students who participate in the plays and performances of the BCC Theater Co. receive one credit per semester. (May be repeated 3 times for credit.)

THR 201, 202 Children's Theater (3, 3)

Touring children's theater company during academic year. Performances at area elementary schools for classtime and assembly programs. Visiting with students pre/post production. Design and construction of costumes, sets, and properties. Analysis of children-oriented plays, development of scripts, rehearsal and performance.

3 Class Hours each

THR 203 Summer Touring Children's Theater Company (3)

Touring children's\ theater company during summer. Performances at area recreation centers, parks, camps and playgrounds. Visiting with children pre/post production. Design and construction costumes, sets, and properties. Analysis of children-oriented plays, development of scripts, rehearsal and performance.

3 Class Hours

THR 218 Role Study and Characterization (3)

The varied creative processes by which an actor might develop a characterization are studied in theory and explored in practice with emphasis upon screenwork.

3 Class Hours

THR 219 Periods and Styles of Acting (3)

Procedures and techniques necessary for acting in theatrical and period productions such as Elizabethan, Italian Renaissance, Restoration, Absurdist and innovative styles.

3 Class Hours

THR 231 Stage Direction I (3)

Examination of the perspective of the director in relation to himself, the play, the actors, designers, playwright, and the collaborative evolution of the production. Development of directing methods and techniques in terms of casting, pictorial emphasis and harmony, rehearsal and production procedures. Preparation of prompt book and direction scenes. Proscenium and non-proscenium techniques.

3 Class Hours

THR 232 Stage Direction II (3)

Detailed analysis of directing in relation to theatrical styles and periods. Examination of the techniques of such directors as Meyerhold, Antoine, Guthrie and Kazan. Direction of pertinent scenes.

3 Class Hours

THR 266 Acting for TV, Film and Commercials (3)

Proficiency in performing before the camera. Character analysis, quick study, re-takes, voice-overs, studio projection, facial nuances, and subtlety of mannerism.

2 Class Hours, 2 Studio Hours

THR 276 Rehearsal and Performance for Television (3)

Casting, rehearsing, and acting in made-for-television drama and comedy scripts.

3 Class Hours

THR 299 Independent Study: Theater (1-3)

An individual student project concerned with advanced work in a specific areaof theater. Conducted under the direction of a faculty member, independent study is concerned with material beyond the scope and depth of the ordinary course.

Prerequisite: 3 Semester hours of college level work in theater

PART 4

Trustee, Sponsor, Administration 125
Faculty 126
State University of New York 123
College Enhancement 132
Index 133
Academic Calendar 136
Map of Campus Inside Back Cover

STATE UNIVERSITY OF NEW YORK (SUNY)

D. BRUCE JOHNSTONE, Chancellor

Broome Community College is one of the 64 colleges that comprises the State University of New York (SUNY), which was established by the State Legislature in 1948. The 64 units include 30 locally-sponsored two-year community colleges like Broome.

State University's 64 geographically dispersed campuses bring educational opportunity within commuting distance of virtually all New York citizens and comprise the nation's largest, centrally managed system of public higher education.

When founded in 1948, the University consolidated 29 State-operated, but unaffiliated, institutions. In response to need, the University has grown to a point where its impact is felt educationally, culturally and economically the length and breadth of the State.

More than 400,000 students are pursuing traditional study in classrooms or are working at home, at their own pace, through such innovative institutions as Empire State College, whose students follow individualized and often non-traditional paths to a degree. Of the total enrollment, approximately 36 percent of the students are 25 years or older, reflecting State University's services to specific constituencies, such as refresher courses for the professional community, continuing educational opportunities for returning service personnel, and personal enrichment for more mature persons.

State University's research contributions are helping to solve some of modern society's most urgent problems. It was a State University scientist who first warned the world of potentially harmful mercury deposits in canned fish, and another who made the connection between automobiles and industrial exhaust combining to cause changes in weather patterns. Other University researchers continue important studies in such wide-ranging areas as immunology, marine biology, sickle-cell anemia, and organ transplantation.

More than 1,000 Public Service activities are currently being pursued on State University campuses. Examples of these efforts include special training courses for local government personnel, State civil service personnel, and the unemployed; participation by campus personnel in joint community planning or project work, and campus-community arrangement for community use of campus facilities.

A distinguished faculty includes nationally and internationally recognized figures in all the major disciplines. Their efforts are recognized each year in the form of such prestigious awards as Fulbright-Hays, Guggenheim and Danforth Fellowships.

The University offers a wide diversity of what are considered the more conventional career fields, such as business, engineering, medicine, teaching, literature, dairy farming, medical technology, accounting, social work, forestry and automotive technology. Additionally, its responsiveness to progress in all areas of learning and to tomorrow's developing societal needs has resulted in concentrations which include the environment, urban studies, computer science, immunology, preservation of national resources, and microbiology.

Overall, at its EOC's, two-year colleges, four-year campuses and university and medical centers, the University offers more than 4,000 academic programs. Degree opportunities range from two-year associate programs to doctoral studies offered at 12 senior campuses.

The 30 two-year community colleges operating under the program of State University play a unique role in the expansion of educational opportunity. They provide local industry with trained technicians in a wide variety of occupational curriculums, and offer transfer options to students who wish to go on and earn advanced degrees.

The University passed a major milestone in 1985 when it graduated its one-millionth alumnus. The majority of SUNY graduates pursue careers in communities across the State.

State University is governed by a Board of Trustees, appointed by the Governor, which directly determines the policies to be followed by the 34 State-supported campuses. Community colleges have their own local boards of trustees whose relationship to the SUNY Board is defined by law. The State contributes one-third to 40 percent of their operating costs and one-half of their capital costs.

The State University motto is: "To Learn — To Search — To Serve."

COLLEGE OF THE STATE UNIVERSITY OF NEW YORK (SUNY)

COMMUNITY COLLEGES

(Locally-sponsored, two-year colleges under the program of State University)

Adirondack Community College at Glens Falls
Broome Community College at Binghamton
Cayuga County Community College at Auburn
Clinton Community College at Plattsburgh
Columbia-Greene Community College at Hudson
Community College of the Finger Lakes at Canandaigua
Corning Community College at Corning
Dutchess Community College at Poughkeepsie
Erie Community College at Williamsville, Buffalo, and Orchard Park
Fashion Institute of Technology of New York City
Fulton-Montgomery Community College at Johnstown
Genesee Community College at Batavia
Herkimer County Community College at Herkimer
Hudson Valley Community College at Troy
Jamestown Community College at Jamestown
Jefferson Community College at Watertown
Mohawk Valley Community College at Utica
Monroe Community College at Rochester
Nassau Community College at Garden City
Niagara County Community College at Sanborn
North Country Community College at Saranac Lake
Onondaga Community College at Syracuse
Orange County Community College at Middletown
Rockland Community College at Suffern
Schenectady County Community College at Schenectady
Suffolk County Community College at Selden, Riverhead, and Brentwood
Sullivan County Community College at Loch Sheldrake
Tompkins Cortland Community College at Dryden
Ulster County Community College at Stone Bridge
Westchester Community College at Valhalla

STATE-OPERATED COLLEGES

UNIVERSITY CENTERS

State University of New York at Albany
State University of New York at Binghamton
State University of New York at Buffalo
State University of New York at Stony Brook

COLLEGES OF ARTS AND SCIENCES

State University College at Brockport
State University College at Buffalo
State University College at Cortland
State University of New York Empire State College
State University College at Fredonia
State University College at Geneseo
State University College at New Paltz
State University College at Old Westbury
State University College at Oneonta
State University College at Oswego
State University College at Plattsburgh
State University College at Potsdam
State University College at Purchase

COLLEGES AND CENTERS FOR THE HEALTH SCIENCES

Health Sciences Center at Brooklyn
Health Sciences Center at Syracuse
College of Optometry at New York City
(Health Sciences Center at Buffalo) *
(Health Sciences Center at Stony Brook) *

COLLEGES OF TECHNOLOGY

State University of New York College of Technology at Alfred
State University of New York College of Technology at Canton
State University of New York College of Agriculture and Technology at Cobleskill
State University of New York College of Technology at Delhi
State University of New York College of Technology at Farmingdale
State University of New York College of Agriculture and Technology at Morrisville
State University of New York College of Technology at Utica/Rome**
(Upper Division and master's programs)

SPECIALIZED COLLEGES

State University of New York College of Environmental Science and Forestry at Syracuse
State University of New York Maritime College at Fort Schuyler

* The Health Sciences Centers at Buffalo and Stony Brook are operated under the administration of their respective University Centers.

** This is an upper-division institution authorized to offer baccalaureate and master's degree programs.

STATUTORY COLLEGES

New York State College of Agriculture and Life Sciences at Cornell University
New York State College of Ceramics at Alfred University
New York State College of Human Ecology at Cornell University
New York State College School of Industrial and Labor Relations at Cornell University
New York State College of Veterinary Medicine at Cornell University

STATE UNIVERSITY OF NEW YORK BOARD OF TRUSTEES

Chair: Frederic V. Salerno, B.S., M.B.A., Rye
Vice Chair: Arnold B. Gardner, A.B., LL.B., Buffalo
Randy I. Campbell
Roderick G. W. Chu, B.S., M.B.A., New York City
D. Clinton Dominick, A.B., LL.B., Newburgh
Judith Lasher Duken, B.S., M.S., C.A.S., Plattsburgh
Hazel Dukes, B.A., Roslyn Heights
John L.S. Holloman, Jr., B.S., M.D., East Elmhurst
Alan V. Iselin, B.A., Albany
Miles L. Lasser, A.B., LL.B., CPA, Jamestown
Victor Marrero, B.A., LL.B., New York City
Nancy H. Nielsen, A.B., M.S., Ph.D., M.D., Orchard Park
Rosemary C. Salomone, B.A., M.A., Ed.M., Ph.D., J.D., LL.M., Brooklyn Heights
(Three Vacancies)

Chancellor
D. Bruce Johnstone, B.A., M.A.T., Ph.D.

Provost and Vice Chancellor for Academic Programs
Joseph C. Burke, B.A., M.A., Ph.D.

Secretary of the University
Martha J. Downey, B.S., M.A.

Senior Vice Chancellor
Harry K. Spindler, B.A., M.P.A.

ADMINISTRATION, FACULTY

BROOME COMMUNITY COLLEGE

Sponsored by the County of Broome
Timothy M. Grippen, County Executive

Education, Culture and Recreation Committee of Broome County Legislature
ROBERT MOPPERT, Chairperson
ROGER BROWN
KATHLEEN GREENMUN
DAVID LINDSEY
VINCENT PASQUALE

College Board of Trustees

SHARON DYER, Chairperson
Attorney
GEORGE AKEL
President
Giant Food Markets
JAMES W. BISHOP, CPA
JAMES A. CARRIGG
President and CEO
New York State Electric and Gas
LEO GILROY, JR.
United Food and Commercial Workers
District Union, Local One
JAMES LEE
Superintendent
Binghamton City School District
JUDITH C. PECKHAM
Executive Director
Hoyt Foundation
GEORGE S. SARKISIAN
President and CEO
Sarco Industries & Sarkisian Brothers, Inc.
JOAN H. YOUNG
Teacher
Binghamton School District
STUDENT TRUSTEE

PRESIDENT

DONALD A. DELLOW
A.A., Paul Smith College
B.A., SUNY at Oswego
M.Ed., Ed.D., University of Florida

VICE PRESIDENTS

BRYAN K. BLANCHARD
Vice President for Academic Affairs
B.A., M.A., Wake Forest University
Ph.D., University of Colorado at Boulder
JOHN J. PIEROG
Vice President for Student Affairs
B.S., M.Ed., Plymouth State College
Ed.D., Nova University
CHARLES J. QUAGLIATA
Chancellor's Award for Excellence in Professional Service
Vice President for Institutional Advancement
B.S., LeMoyne College
M.A., Syracuse University
HELEN C. VERES
Vice President for Administration
A.B., College Misericordia
M.S., SUNY at Cortland
Ph.D., Cornell University

Affirmative Action Officer and 504 Coordinator

MARIA SANTOS
B.A., University of Colorado
J.D., University of Colorado Law School

ACADEMIC AFFAIRS DIVISION

BRYAN K. BLANCHARD
Vice President for Academic Affairs
B.A., M.A., Wake Forest College
Ph.D., University of Colorado at Boulder
ÉLIZABETH QUAIN, Staff Associate to the Vice President for Academic Affairs
B.A., SUNY at Binghamton
M.A., SUNY at Binghamton

CECIL C. TYRRELL LEARNING RESOURCES CENTER

WANDA K. JOHNSTON, Director
B.A., University of Northern Iowa
M.S., Illinois State University
M.L.S., Rosary College
JANE M. RAWOOF, Asst. Librarian
B.A., George Washington University
M.S.L.S., Catholic University
DEBORAH L. SPANFELNER, Associate Librarian
B.A., Nazareth College
M.A., SUNY at Binghamton
M.L.S., Syracuse University
SUZANNE G. SULLIVAN, Librarian
B.A., Nazareth College
M.S.L.S., Syracuse University
MARGARET A. WINGATE, Librarian
B.A., Boston University
M.L.S., SUNY at Albany
M.A., SUNY at Binghamton
ANN REPASKY
CAROL RIPIC

Emeritus

JAMES D. BAKER
JOAN FOLEY
JANET K. POLAND

AUDIO-VISUAL

LAWRENCE A. JENKINS, AV Coordinator, Asst. Librarian
A.B., M.L.S., Syracuse University
KURT NELSON, Tech. Asst. II
A.A.S., Broome Community College
KONRAD BACH, M.T.

COMPUTER CENTER

GRANT NEWTON, Director
A.A.S., Broome Community College
B.S., M.A., SUNY at Binghamton
KENNETH MANSFIELD
Assistant Director
A.A.S., Broome Community College
EDWIN GADECKI, Programmer Analyst
B.S., Northeastern University
M.S., Northeastern University
DOLORES V. NEWBY, Programmer Analyst
A.A.S., Broome Community College
B.S., Empire State College
JOHN PETKASH, Programmer Analyst
A.A.S., Broome Community College
B.S., SUNY at Oswego
DANIEL RUSSELL, Tech Asst. II
A.A.S. Broome Community College
MATHEW RYAN, Tech. Asst. II
B.S., SUNY at Binghamton
J. LEE SKORKO, Programmer Analyst
A.A. Corning Community College
A.A.S., (Chem.), Broome Community College
A.A.S., (Ind. Tech., Computer Emph.), Broome Community College
B.A., SUNY College at Cortland
M.S., SUNY at Binghamton
JEFFREY M. HATALA, CAD/CIM Systems Analyst
A.A.S., Alfred Ag. & Tech. (Architecture)
A.A.S., Alfred Ag. & Tech. (Computer Graphics)

DISABLED STUDENT SERVICES

BRUCE E. POMEROY, Coordinator
A.A., Broome Community College
B.A., University of Iowa
M.A., Bradley University

INFORMATION CENTER FOR EVENING & PART-TIME STUDENTS

JOAN ALESI, Coordinator of Evening Services
B.A., University of Wisconsin, Green Bay

INSTITUTIONAL RESEARCH

ERIC E. BEAMISH
B.S., Concordia College
M.A., Ed.D., Columbia University
LINDA L. MAPES, Staff Assoc.
A.A., Broome Community College
B.S., M.A., SUNY at Binghamton

LEARNING ASSISTANCE DEPARTMENT

STEVEN NATALE, Chairperson
B.A., St. John Fisher College
M.A., SUNY at Brockport
CARMEN DEVITA, Asst. Prof.
B.S., SUNY at Oswego
M.A., SUNY at Binghamton
LISA HUGHES, Coordinator, Learning Disabilities Program
B.S., Ohio State
M.A., Mansfield University
LORETA PANICCIA, Coordinator, Peer Tutoring Program
B.S., M.A., SUNY at Binghamton
MARIA SANTOS, Asst. Prof.
B.A., J.D., University of Colorado
DONALD DUNHAM
SUSAN HESSE
LAURIE McKEVENEY
KATHY RYDER
ALICE WHITE

REGISTRAR'S OFFICE

JO VAN WELY, Registrar
Chancellor's Award for Excellence in Professional Service
B.A., George Washington University
M.S., Boston University
ROSEMARY ZINNER, Asst. Registrar
A.A.S., Broome Community College
B.S., SUNY at Binghamton

STUDENT SUPPORT SERVICES

BRUCE E. POMEROY, Director
A.A., Broome Community College
B.A., University of Iowa
M.A., Bradley University
CARRIE A. DEAN, Asst. Director
A.A., Broome Community College
B.S., Elmira College

Deans

WILLIAM R. REILLY
Business and Office Technologies
B.S., University of Minnesota
M.B.A., University of Minnesota
Ph.D., Purdue University
JOSEPH K. GAY
Health Sciences
Assoc. Prof. in Biology
B.S., Wilkes College
M.A., Colgate University
GEORGE HIGGINBOTTOM
Chancellor's Award for Excellence in Professional Service
Liberal and General Studies
Asst. Prof. in History
B.A., Harvard College
M.A., San Francisco State University
Ph.D., Cornell University
WILLIAM C. BESTON, JR.
Technology, Engineering and Computing
B.S., M.S., Clarkson University

Faculty

BIOLOGICAL SCIENCES

RICHARD FIRENZE, Chairperson
Chancellor's Award for Excellence in Teaching
B.S., Cornell University
M.S., Elmira College
GEORGE P. FERRARI, Prof.
B.S., M.S., St. John's University
ELLIOT REITZ, Prof.
Chancellor's Award for Excellence in Teaching
B.S., Clarion State College
M.S., Ohio University
DAVID STERLING, Assoc. Prof.
B.S., West Virginia Wesleyan College
M.S., Purdue University
DONALD B. WAGER, Prof.
B.A., Harpur College
M.A., SUNY at Binghamton
Ph.D., SUNY at Binghamton
DAVID K. WALSH, Professor
Chancellor's Award for Excellence in Teaching
A.A.S., Orange County Community College
B.S., SUNY at Buffalo
M.N.S., University of Idaho
MARK DEMETROS
TAMARA IVAN
DIANE T. KANE
ANNE MIELE
MARK MULLER
LUIGI PIZZUTI
SANDRA WHITTAKER

Emeritus

FLOYD R. WEST

BUSINESS (Accounting, Marketing/Management, Business Administration, Real Estate)

RICHARD BEHR, Chairperson, Professor
A.S., Broome Community College
B.S., M.B.A., SUNY at Binghamton
W. JAMES ABBOTT JR., Prof.
B.B.A., Clarkson College of Technology
M.S., SUNY at Albany
ANNE BLAKESLEE, Assoc. Prof.
A.A., Broome Community College
B.S., M.A.S., M.Ed., Johns Hopkins University
JOHN J. BUNNELL, Assoc. Prof.
A.A.S., Alfred Agricultural and Technical College
B.B.A., Drake College of Florida
M.B.A., University of Scranton
JAMES C. CAVERLY, Assoc. Prof.
A.A.S., Broome Community College
B.A., M.S., SUNY at Albany
THOMAS E. DECELLE, Asst. Prof.
A.A.S., Hudson Valley Community College
B.S., Murray State University
ROBERT D. FITZGERALD, Instr.
A.A.S., Broome Community College
B.S., Jacksonville University
M.S., LaSalle University (Louisiana)
CHARLES HESS, Asst. Prof.
B.S., Bloomsburg State College
M.Ed., Bloomsburg State College
RALPH D. HOLLOWAY, Prof.
B.S., Oklahoma State University
M.S., Syracuse University
THOMAS KANICK, Assoc. Prof.
A.A.S., Broome Community College
B.S., B.A., Bryant College
M.S., SUNY at Binghamton
MICHAEL J. KURYLA, Assoc. Prof.
B.A., M.A., SUNY at Binghamton
WAYNE LOCKWOOD, Assoc. Prof.
A.A.S., Broome Community College
B.S., Florida State University
M.B.A., University of Scranton
WILLIAM J. MATECHAK, Assoc. Prof.
A.A., Keystone Junior College
B.S., Bloomsburg State College
M.S., Pennsylvania State University
ROBERT O. NEWCOMB, Asst. Prof.
B.S., Syracuse University
JANICE PITERA, C.M.A., Assoc. Prof.
B.S., Penn State University
M.B.A. SUNY at Binghamton
THOMAS ROSSI, Prof.
B.S., Macalester College
M.B.A., Indiana University
KENNETH R. SANFORD, Professor
A.A.S., B.B.A., Rochester Institute of Technology
M.S., SUNY at Binghamton
MID SEMPLE, Assoc. Prof.
A.A., Tobe Coburn School
B.S., SUNY at Binghamton
M.A.S.S. SUNY at Binghamton
RAYMOND VAN NESS, Asst. Prof.
B.S., M.S., Elmira College
NATHAN WALZ, Tech. Asst. II
A.A.S., Broome Community College
GLEN WOOD, Assoc. Prof.
A.A., Broome Community College
B.A., M.S., Elmira College
ADAM YOUNKER, Assoc. Prof.
B.S., King's College
M.B.A., University of Scranton
ANNAMARY ALLEN
WILLIAM CONDIE
CHARLES DUCAR
SALLY GILLESPIE
GERALD HLOPKO
THOMAS KETRICK
JERRY LOY
WILLIAM MANEY
JACK MOSES
EDWARD PETRAS
ROB SALAMIDA
GEORGE SHEA
MARK STANLEY
JOHN TURNA
MARGARET TURNA
JO VAN WELY
LORI WAHILA
DENNIS WALKER
KATHY WOOD

Emeritus

ROBERT L. CANN
A. JAMES KALBAUGH
STAN LEE
RICHARD W. STOWELL

CHEMISTRY AND CHEMICAL ENGINEERING TECHNOLOGY

BRENDAN R. FLYNN, Chairperson, Prof.
B.S., M.S., Lowell Technological Institute
Ph.D., Clarkson College of Technology
MICHAEL J. COSTELLO, Prof.
B.S., University of Scranton
Ph.D., SUNY at Binghamton
JAMES L. FISH, Asst. Prof.
A.A.S., Fulton-Montgomery Community College
B.S., Syracuse University
M.A., SUNY at Binghamton
ANTHONY G. LO TEMPIO, Prof.
Chancellor's Award for Excellence in Teaching
B.S., St. Bonaventure University
M.S., SUNY College at Oneonta
M.S., Cornell University
WILLIAM METZAR, Prof.
A.A.S., Broome Community College
B.S., M.S., SUNY College of Environmental Science and Forestry
JOHN W. MICHA, Tech. Asst. II
A.A.S., Broome Community College
CATHERINE M. RYAN, Tech. Asst. I
A.A., Broome Community College
B.A., SUNY at Binghamton
ARTHUR J. STANKEVITZ, Assoc Prof.
B.Ch.E., Rensselaer Polytechnic Institute
M.S., Clarkson College of Technology
HAROLD H. TRIMM, Prof.
B.S., M.S., Ph.D., Clarkson University
MICHAEL J. WOVKULICH, Asst. Prof.
B.S., SUC Cortland
M.A., Ph.D., SUNY Buffalo

Emeritus

MICHAEL ORINIK
DAVID FERGUS

CIVIL ENGINEERING TECHNOLOGY

EDWARD F. DOUGHERTY, Chairperson, Prof.
B.C.E., Villanova University
KELLI H. LIGEIKIS, Asst. Prof.
B.S., Clarkson University
M.A., SUNY at Binghamton
ARTHUR L. HAAS, Assoc. Prof.
B.S., University of Rhode Island
M.S., University of Illinois
Professional Engineer
JONATHAN ROOK, Prof.
B.C.E., M.C.E., Cornell University
Professional Engineer and Licensed Land Surveyor
RICHARD J. POLIZATTO
DONALD BROWN
JAMES BRYDEN

Emeritus

WARREN W. HOYT
STEPHEN G. STEELE

COMPUTER STUDIES

BETH MOLLEN, Chairperson, Assoc. Prof.
B.A., SUNY at Cortland
M.B.A., University of Scranton
PAULETTE GANNETT, Asst. Prof.
B.S., M.S., SUNY at Binghamton
RACHEL HINTON, Asst. Prof.
B.S., M.S., SUNY at Binghamton
GARY KOHUT, Tech. Asst. II
A.S., Broome Community College
B.S., SUNY at Binghamton
DAVID MCLOUGHLIN, Prof.
A.A.S., Cayuga Community College
B.S., LeMoyne College
M.A., Ph.D., SUNY at Binghamton
ALICE MCNEELY, Assoc. Prof.
B.F.A., Syracuse University
M.S., SUNY at Binghamton
WILLIAM MURRAY, Prof.
B.S., M.S., Ed.D., Temple University
JOANNE O'DONNELL, Asst. Prof.
B.A., M.A., SUNY at Binghamton
MICHAEL O'KANE, Asst. Prof.
B.A., Sheffield College of Art & Design
M.S., SUNY at Binghamton
CHRIS PAPPAS, Assoc. Prof.
B.A., SUNY at Oneonta
M.S., SUNY at Binghamton
SANDRA WRIGHT, Asst. Prof.
B.A., University of Tennessee
M.B.A., SUNY at Binghamton
JAMES BALKO
OWEN FITZGERALD
SONDRA FOREMAN
AMARDEEP KAHLON
RICHARD PANKO
MOLLY POLIQUIN
JENNIFER SEDELMEYER
ED ZISKA

Emeritus

MARY DIEGERT

CRIMINAL JUSTICE

RICHARD FITZPATRICK, Coordinator
A.A.S., Broome Community College
B.S., Elmira College
M.S., Elmira College
VINCENT ACCARDI
C. SCOTT BOWEN
WILLIAM BROWN
LOUIS CROSETTO
KENNETH CRUMP
PAUL DiNARDO
KEVIN DOOLEY
CARL FENESCY
WALTER FORD
ROSE HUTCHERSON
ROBERT KENT
PHILOMENA KUSHNER
JOSEPH ROMANI
JAMES SHOEMAKER
STEPHEN VIZVARY
BRADLEY WAHL

DENTAL HYGIENE

DOROTHY J. WALSH, R.D.H., Chairperson
A.A.S., Broome Community College
B.S., SUNY at Cortland
M.A., SUNY at Binghamton
FREDERICK O. JOHNSON, D.M.D.
Prof., Supervising Dentist
B.A., Colgate University
D.M.D., University of Pennsylvania
SUZANNE M. MAIER, R.D.H., Assoc. Prof.
A.A.S., Broome Community College
B.S., Boston University
M.S., SUNY at Binghamton
MAUREEN MULLINS HANKIN
R.D.H., Assoc. Prof.
B.S., University of Detroit
M.P.H., University of Michigan
D. ELSIE WAGER, Prof.
B.S., West Liberty State College
M.S., SUNY at Cortland
D. BETH SCOTT, R.D.H., Asst. Prof.
B.A., Colgate University
B.S., Columbia University
M.S.Ed., SUNY at Binghamton
DEBRA BIGSBY, R.D.H.
KATHLEEN CASE, R.D.H.
PAULA FITCH, R.D.H.
SUZANNE KENNEDY, R.D.H.
PAMELA QUINN, R.D.H.
CAROLE STANLEY, R.D.H.

DIETARY MANAGER

JUDITH KOMARINETZ, R.D. Coordinator
KATHY BELL, R.D.
DONALD SHULMAN, R.D.

EARLY CHILDHOOD

BARBARA NILSEN, Coordinator
A.A.S., Broome Community College
B.S., M.A.S.S., SUNY at Binghamton
Ed.D., Nova University
SUE ATKINSON
SUE BENNETT
CAROL FULLER
MERRY McNALLY
BARBARA REINING
MARY ROUSO
JOAN ROZEN
MARILYN J. SCHAFER
SANDRA SCHOONMAKER
ANN SCHULTISE
THERESA SOLECKY
MARCY SWARTZ
BRENDA TESTANI
BRENDA TRUEX
JUDY WINCKLER

ELECTRICAL ENGINEERING TECHNOLOGY

ALAN C. DIXON, Chairperson
B.S.E.E., M.S., Clarkson University
JAMES L. ANTONAKOS, Asst. Prof.
A.A.S., Broome Community College

B.S.E.E., Rochester Institute of Technology
M.S., SUNY at Binghamton
CHRISTOPHER J. CONANT, Instr.
A.A.S., Broome Community College
B.T., M.S., SUNY at Binghamton
BRUCE F. DeVOE, Assoc. Prof.
B.S., M.S., SUNY at Buffalo
GARY C. DiGIACOMO, Instr.
A.A.S., Broome Community College
B.T., M.S., SUNY at Binghamton
RICHARD J. LEO, Assoc. Prof.
A.A.S., Broome Community College
B.S., M.S., SUNY at Oswego
DONOVAN E. McCARTY, Tech. Asst. II
A.A.S., Broome Community College
BINA PARAMASIVAIAH, Asst. Prof.
B.S.E.E., Bangalore University, India
M.S.E.E., University of Connecticut
MICHAEL COPPOLA
DANIEL J. YOUNGS

Emeritus
EDWARD F. TROICKE
CHARLES W. DAHILL
WILLIAM DERVAY
ROBERT L. REID

ENGINEERING SCIENCE AND PHYSICS

JACK D. FOSTER, Chairperson, Prof.
B.S., Calvin College
M.S., Yeshiva University
JOSEPH BIEGEN, Prof.
B.Ch.E., B.S., M.S., Ph.D., Clarkson University
ROBERT K. FORSYTHE, JR., Prof.
B.S., Ursinus College
M.S., Clarkson University
Ph.D., Kent State
JOHN W. GERTY, Prof.
B.A., SUNY at Buffalo
M.S., University of Iowa
MICHAEL GLASGOW, Asst. Prof.
B.S., Memphis State University
M.S., SUNY at Binghamton
KAREN GOODMAN, Prof.
B.S., SUNY at Albany
M.S., Cornell University
THOMAS B. GRACE, Asst. Prof.
B.S., M.S., Clarkson University
Intern Engineer
DOUGLAS HAVEN, Tech. Asst. II
HOWARD HERZOG, Prof.
B.E.E., M.S., City College of New York
LUDWIG P. LANGE, Prof.
B.S., Concordia University, Montreal
M.S., Birmingham University, United Kingdom
RALPH McGREW, Assoc. Prof.
B.S., Pennsylvania State University
M.S., Cornell University
BRUCE OLDFIELD, Asst. Prof.
B.S., SUNY at Cortland
M.A., SUNY at Binghamton
RICHARD PLUMER, Assoc. Prof.
B.S., M.S., Ph.D., University of Illinois
A.M., Columbia University
PETER RUGGIERI, Coordinator, Asst. Prof.
B.S., Cooper Union
M.S., University of Pennsylvania
SANAN ABDERRAHMAN
MARILYN AKINS
CLARE GIBBS
ROBERT LOFTHOUSE
LORRAINE SULLIVAN

Emeritus
GORDON DATES
HENRY KETCHUM
MARGUERITE RABOY
IRVIN SIMSER

ENGLISH

RUSSELL N. LITTLEFIELD, Chairperson
B.A., Colgate University
M.A., SUNY at Cortland
REBECCA J. BENNETT, Assoc. Prof.
B.A., SUNY at Fredonia
M.A., University of Tennessee
DENTON COVERT, Jr., Assoc. Prof.
B.A., West Virginia Wesleyan College
M. Div., Wesley Theological Seminary
M.A., SUNY at Binghamton
MARGARET DEYS, Assoc. Prof.
B.S., M.S., SUNY at Cortland
MARY DICKSON, Assoc. Prof.
B.A., St. Lawrence University
M.A., SUNY at Oswego
PATRICIA DURFEE, Prof.
B.S., SUNY at Buffalo
M.A., John Carroll University
ERNEST C. GIORDANI, Prof.
B.A., M.A., SUNY at Binghamton
JACK GUILLON, JR., Assoc. Prof.
A.A., Broome Community College
B.A., M.A., SUNY at Binghamton
STEPHEN A. KORDUCAVICH, Prof.
B.S., M.S., University of Scranton
DAVID M. LEVEE, Asst. Prof.
B.A., Syracuse University
JAMES B. NOVAK, Assoc. Prof.
B.A., M.A., SUNY at Binghamton
Ph.D., Syracuse University
GREG SARACENO, Assoc. Prof.
B.A., Ithaca College
M.A., SUNY at Binghamton
ANN D. SOVA, Prof.
Chancellor's Award for Excellence in Teaching
B.A., SUNY at Oswego
M.A., SUNY at Cortland
RICHARD STONER, Assoc. Prof.
B.A., LeMoyne College
M.A., Colgate University
RUTH STRATTON, Assoc. Prof.
A.A., Broome Community College
B.A., M.A.T., SUNY at Binghamton
ROBERTA WILLIAMS, Tech. Asst. II
B.A., M.A., Ph.D., SUNY at Binghamton
VICTORIA BELENKAYA
JOAN COLLINS
KATHY COLLINS
DAVID DANIELS
JACK DANN
CAROLANNE DUHAMEL
DONALD DUNHAM
JOSEPH FERRANDINO
KASSIA FLEISHER
BARBARA FOSTER
KAREN FRANKLIN
MICHAEL GEE
PAULETTE HACKMAN
ANNA HALLIGAN
ALEXANDRA HEDER
PEGGY HILL
JEROME KILMER
MARGERET LoGALBO
PAMELA MACKEY
DAVID MASLAR
FRIDOLIN MELLERT
DIANNE METZER
CAROL MIKODA
STEPHEN NATALE
KATLIN NEWTON
DONALD PHILLIPS
DAVID PITCHER
MADELINE ROBINSON
CRAIG RUSSELL
THOMAS SAVAS
JEANNE SMITH
JUDITH SUMNER
BARBARA ULMANN
LUCILLE WASHBURN

Emeritus
SHIRLEY OSMUN

FIRE PROTECTION TECHNOLOGY

STEPHEN ANDREW, Coordinator
MARK DEDRICK
THOMAS GEISENHOF
RICHARD GILBERT
MICHAEL HEIDE
STEPHEN HRUSTISCH
JOHN KRATOCHVIL
JAMES RYAN

HISTORY AND SOCIAL SCIENCES

DOUGLAS GARNAR, Chairperson
B.A., M.A., SUNY at Albany
FRANCIS L. BATTISTI, Prof.
Chancellor's Award for Excellence in Teaching
A.A.S., Broome Community College
B.S., M.S., SUNY at Albany
M.S.W., Syracuse University
THOMAS L. CRANDELL, Prof.
B.A., Kings College
M.S., University of Scranton
Ph.D., Cornell University
CHARLES CROLL, Prof.
B.A., SUNY at Binghamton
M.S., SUNY at Oneonta
FRANK S. DISTEFANO, Prof.
A.B., University of South Carolina
M.A., SUNY at Albany
LORENZ FIRSCHING, Assoc. Prof.
A.A., Broome Community College
B.A., M.A., Ph.D., SUNY at Binghamton

GERALD FREEMAN, Prof.
A.A., Keystone Junior College
B.S., East Stroudsburg State College
M.S., SUNY at Cortland
BENTZIL M. KASPER, Professor
B.A., Boston University
M.A.T., Antioch University
M.Ph., Syracuse University
M.B.A., SUNY at Binghamton
JO ANNE MANIAGO, Professor
Chancellor's Award for Excellence in Teaching
B.A., University of Tennessee
M.A., Ph.D., Boston University
ROGER McVANNAN, Prof.
B.A., SUNY at Binghamton
M.A., M.S., SUNY at Albany
RICHARD M. ROMANO, Prof.
B.A., St. Lawrence University
M.A., Ph.D., SUNY at Binghamton
MARGHERITA ROSSI, Asst. Prof.
B.S., University of Scranton
M.A., Fairleigh-Dickinson University
MARY ANN THROUP
B.A., M.A., Ph.D., SUNY at Binghamton
WILLIAM BOWIE
CHRIS BURGER
WILLIAM CASE
HAROLD KOSTER
ALBERTO MILLER
PATRICK O'NEIL
MARIBETH PALMER-KING
CAROLYN SCHMIDT
ROBERT SHIELDS

Emeritus

PATRICIA BEGASSE
FRANCIS CASELLA
ROBERT COTTEN
W. PORTER SWIFT

HUMANITIES

PAUL A. CHAMBERS, Chairperson
B.A., St. Bernard's Seminary
M.Ed., Cornell University
JAMES E. BOYDEN, Assoc. Prof.
B.A., SUNY at Binghamton
M.A.T., Brown University
JOHN BUTCHKO, Coordinator
Communication and Media Arts
A.A.S., Broome Community College
B.S., M.S., SUNY at Oswego
ANNE B. COTTEN, Assoc. Prof.
B.S., Drexel University
M.A., Cornell University
FRANCIA ESPINOSA
B.A., M.A.T., SUNY at Binghamton
MARTHA FENTY, Asst. Prof.
B.A., Fisk University
M.A.T., SUNY at Binghamton
MICHAEL KINNEY, Prof.
Chancellor's Award for Excellence in Teaching
B.A., Glassboro State College
M.M., SUNY at Binghamton
Ed.D., Syracuse University
HAROLD SUNSHINE, Assoc. Prof.
B.A., M.Ed., SUNY at Buffalo
PATRICIA WELLER, Assoc. Prof.
A.A., Broome Community College
B.A., SUNY at Binghamton
ANGELO ZUCCOLO, Assoc. Prof.
B.A., Providence College
M.A., SUNY at Binghamton
RICHARD BARONS
ELIZABETH BOSSONG
ELAINE CORTS
LAURA CUNNINGHAM
DENNIS CURATOLO
VICTORIA DiLORENZO
KERRY DONOVAN
TERRI ECKERT
SAMUEL GIOVINAZZO
GERALD GRAHAME
STEPHEN GRIETZER
GEOFFREY GROGAN
LOLA KAMINSKY
BARBARA LIGI
LINDA McELHARE
JESSICA PATRICK
VINCENT PENELLA
HELEN SACCO
CAROLE STANLEY
PAUL SWEENY
MICHAEL TANZER
DIANE WEYNA
JOHN YOUNG
JANET ZABLOCKI

Emeritus

HERBERT CHURCH-SMITH
MILTON KIRKPATRICK
JOSEPH PETRONE

LIBERAL AND GENERAL STUDIES

GEORGE HIGGINBOTTOM
Dean of the Division
B.A., Harvard College
M.A., San Francisco State University
Ph.D., Cornell University

Emeritus

LLOYD W. HARTMAN
HAROLD W. HICKEY

MATHEMATICS

MORTON GOLDBERG, Chairperson, Prof.
B.A., SUNY at Binghamton
M.A., SUNY at Buffalo
ANN CLEARY, Asst. Prof.
A.B., Marywood College
M.S.T., SUNY at Binghamton
DANIEL W. DODWAY, Prof.
B.S., St. Lawrence University
M.S., SUNY at Albany
CARMELITA KEYES, Prof.
B.A., University of Kansas
M.A.T., M.S., SUNY at Binghamton
ELIZABETH KLIPSCH, Assoc. Prof.
B.S., University of Illinois
M.S., University of Illinois
JEAN M. KRICHBAUM, Asst. Prof.
B.S., LeMoyne College
M.A., M.A.T., SUNY at Binghamton
MARIA LANDER, Asst. Prof.
B.S., Catholic University of Peru
M.S., Catholic University of Peru
M.S., SUNY at Binghamton
DAVID MICHALAK, Tech. Asst. II
A.S., Broome Community College
B.S.M.E., Rochester Institute of Technology
M.A.T., SUNY at Binghamton
JOSEPH F. MILENSKY, Prof.
B.A., SUNY at Binghamton
M.A., University of New Mexico
LUIS MORENO, Assoc. Prof.
B.S., Rensselaer Polytechnic Institute
M.S., SUNY at Albany
PAUL O'HERON, Prof.
A.A., A.A.S., Monroe Community College
B.S., SUNY at Fredonia
M.S., Michigan State University
RICHARD L. REMIZOWSKI, Assoc. Prof.
A.A.S., Mohawk Valley Community College
B.A., SUNY at Oswego
M.A., SUNY at Buffalo
GREGORY SLIWA, Asst. Prof.
B.S., Niagara University
M.A., University of Missouri-Columbia
ROBERT WOODS, Assoc. Prof.
B.S., St. Bonaventure University
M.S., Elmira College
RICHARD BISHOP
PAUL BOUTON
THOMAS BOYUKA
ANNETTE BUCINELL
JANE COLAPIETRO
GEORGIANN GALANT
PAMELA HINE
MICHAEL IANNONE
JAMES JENSEN
LINDA KUZAWINSKI
DOUGLAS LEIGH
PATRICIA LIVERMORE
SYLVIA MARTINEZ-KENNEDY
TAMARA MARUSICH
KATHLEEN PENDLETON
JAFAR SALIMI
WILLIAM SARGEANT
ENDRE SARKANY
SHELLEY STANLEY
JOHN TURNA
KATHLEEN WISE
MARY WOLYNIAK
SYLVIA ZAMBRANO

Emeritus

GORDON DATES
CHARLES RICKER
IRVIN C. SIMSER

MECHANICAL ENGINEERING TECHNOLOGY

WILLIAM G. KELLY, Chairperson
A.A.S., Johnson Institute of Technology
B.S., SUNY College of Technology
M.S., SUNY at Oswego
DIRK J. ELLIOTT, Asst. Prof.
A.S., Broome Community College
B.S.M.E., Clarkson University
M.A.T., SUNY at Cortland
JOHN PETREWSKI, Assoc. Prof.
B.S., M.S., Wilkes College
FRANCIS P. PLUNKETT, Asst. Prof.
B.S., Spring Garden College
M.S., Rochester Institute of Technology
Professional Engineer

ANDREW J. SOLAK, Tech. Assistant II
A.A.S., Broome Community College
B.S., Rochester Institute of Technology
JOHN BRUCE
LAIMONS DRUPA
LOUIS EVANGELISTI
DAVID HAGERMAN
NATE OLSEN
ROY TAYLOR
RICHARD VLASAK
ROBERT ZIELEWICZ

Emeritus

MARION A. FORBES
HERBERT L. DURST
DOUGLAS RITTENHOUSE
BLAINE K. ELLIS

MEDICAL ASSISTANT

BONNIE LOU DEISTER, Chairperson
A.A.S., Medical Assisting, DeAnza College, CA
B.S.N., University of the State of New York
CMA-C.
MARY ANNE FRANCHAK
A.A.S. Nursing, Broome Community College
B.S.N. Nursing, SUNY at Binghamton

CLINICAL AFFILIATE FACULTY MEDICAL ASSISTING

BARBARA BALACI, R.N.
MARY BUSS
PHYLLIS DEVINE, C.M.A.
M. ELLEN DONOVAN
KATHY FROST, C.M.A.
BEA GRACE, R.N.
NANCY GREENE
PAT LESTER
PATRICIA PADEN, C.M.A.

Emeritus

CLYDE CHAUNCEY
MARY E. SCHUM
TERESSA H. BURAN

MEDICAL LABORATORY TECHNOLOGY

JULIA E. PEACOCK, Chairperson
B.S., Michigan State University
M.S., SUNY Health Science Center at Syracuse
MAXIMILLIAN D. BORSKI, Assoc. Prof.
B.S., Southwest Missouri State College
M.S., University of Missouri
SHARON SICKLES, Ph.D., M.T. (ASCP)
SANDRA WHITTAKER
MIRIAM ARNOLD, B.A., C (ASCP)
BARBARA BAGAN, M.T. (ASCP)
DAVID BONHOFF, M.T. (ASCP)
JEANNINE BONHOFF, M.T. (ASCP)
SANDRA BORDWELL
BARBARA BROWNRIGG, M.T. (ASCP) SH
BONNIE BURTON, M.T. (ASCP)
ANGELA CARRO, M.T. (ASCP)
STEVEN COLLIER, B. Sc., C. (ASCP)
DAVID COLLINS, B.S., ASCC
JAMES DENKO, B.S.
LORNA DEWITT, A.A.S.
GARABED FATTAL, M.D.
ED FITZGERALD, M.L.T. (ASCP)
NORMAN FREDERICK, M.T. (ASCP)
CAROLYNN FULLER, M.B.A., M.T. (ASCP)
E. MARTIN GREBLESKI, B.A., B.S., M.T. (ASCP)
MARY GREENE, M.A., B.L.D. (ABB)
JUDITH HORVATH, M.L.T. (ASCP)
JOSEPH HULL, M.S., C.L.S. (NCA) H.
KENNETH HULL, B.S.
MARCIA JANKOWSKI, M.L.T. (ASCP), B.S.
ALZINA JOHNSON, M.T. (ASCP)
LINDA KEMERY, M.T. (ASCP) SM
JAMES LOCKWOOD, M.T. (ASCP) S.H.
LOURDES MADAMBA, C (ASCP) SC
CEIL MILLER, M.T. (ASCP) SBB
IRENE MOON, M.T. (ASCP)
THERESA MURPHY, M.T. (ASCP)
LINDA REDMOND, M.S., M.T. (ASCP)
LYNETTE REXFORD, M.T. (HEW)
DENISE ROGUS, M.L.T. (ASCP)
LINDA RUNNE, B.S., M.L.T. (ASCP)
JAMES TERZIAN, M.D.
EVELYN THOMAS, B.S.
WILLIAM TROLIO, M.B.A., M.T. (AMT), C.L.S. (NCA)
ROBERT TUGGEY, Ph.D.
NANCY VERSTEIG, C.L.A. (ASCP)
DANIEL VESPI, M.T. (ASCP)
PATRICIA WALSH, M.S., M.T. (ASCP)
JOHN WALTERS, B.S.
JAYNE WEST, B.S.
MARY LOU WHITAKER, B.A., M.T. (HEW)
TIMOTHY WILLIAMMEE, B.S., M.T. (ASCP)
BARRY WINTERS, M.S.A., M.S.M.T., M.T. (ASCP) SM
ANNE WOLANSKI, B.S.E., (ASCP) S.H.
LYLA WOLFORD, M.T. (ASCP) S.C.
LOREN WOLSH, M.D.
ROSE ZEBROSKI, B.A., M.T. (ASCP)

MEDICAL RECORD TECHNOLOGY

MARY ROSATO, Chairperson
B.S., University of Detroit-Mercy
M.A., SUNY at Binghamton
R.R.A.
JANE R. HLOPKO, Asst. Prof.
A.A.S., Broome Community College
B.S., SUNY at Binghamton
M.A., SUNY at Binghamton
A.R.T.
MARY CASTERLINE, A.R.T., A.A.S.
JO ANN DeLUCA, R.R.A., B.S.
DOROTHY ERNEY, R.R.A., B.S.
MARGARET GALLAGHER, A.R.T.
SANDRA THOMPSON, R.R.A.
LORRAINE WHEELER, A.R.T., A.A.S.

NURSING

CLAIRE LIGEIKIS-CLAYTON, Chairperson, Assoc. Prof.
B.S., SUNY at Binghamton
M.S., SUNY at Binghamton
MARLENE BENSON, Asst. Prof.
B.S., M.S., SUNY at Binghamton
BEVERLY CLARK, Asst. Prof.
B.S., M.S., SUNY at Binghamton
J. PATRICIA LEE, Assoc. Prof.
B.S., Keuka College
M.S., Syracuse University
BARBARA MARCKX, Assoc. Prof.
B.S.N., Georgetown University
M.S.N., University of Colorado
MARY P. MORE, Assoc. Prof.
B.S., Villanova University
M.S.N., Boston University
JACQUELINE M. SHRADER, Assoc. Prof.
B.S.N., Niagara University
M.S.N., Syracuse University
JANET WRIGHT, Assoc. Prof.
B.S., M.S., Syracuse University
TERESA AHERNS
JANET DENMAN
WENDY HECKMAN
KIM-MARIE HUCK
COLLEEN MARASCIA
KAREN McMICHAEL
PATRICIA NEWLAND
PATRICIA PETKO
CAROLYN PIERCE
FAY SCHWARTZ
ROSEANN SULLIVAN

OFFICE TECHNOLOGIES

JOAN BANDURCHIN-PIEROG, Assoc. Prof.
A.A.S., Broome Community College
B.S., Kent State University
M.S., SUNY College of Technology
MARIE DAVENPORT, Assoc. Prof.
A.A.S., Broome Community College
B.S., M.S., SUNY at Albany
PATRICIA C. FRANKS, Asst. Prof.
B.S., Bloomsburg University
M.A.S.S., SUNY at Binghamton
EVELYN A. KATUSAK, Prof.
B.S., M.S., SUNY at Albany
PATRICIA C. MULESKY, Tech. Asst. II
A.A.S., Broome Community College
AGATINA VALLONE, Asst. Prof.
A.A.S., Broome Community College
B.S., M.S., SUNY at Albany
ROBERT LANE
ESTER SABOL
MARGARET TURNA

PARALEGAL ASSISTANT

MATTHEW VITANZA, Coordinator
DANIEL CASELLA
LINDA FORSMAN
EILEEN KANE
GERALD LOY
DEBORAH McGUIRE
LINDA PRUSECKI
BETH SECAUR

PHYSICAL EDUCATION

OZMUN G. WINTERS, Chairperson
B.A., Syracuse University
M.S., Ithaca College
EDWIN C. DAUB, Assoc. Prof.
B.S., M.S., SUNY at Cortland
NANCY KENDROT
B.S., Cortland
M.S., University of Scranton
DUANE WHITTAKER, Asst. Prof.
B.S., SUNY at Cortland
HELEN BATTISTI
THOMAS CARTER
ADANA COVERT
TERESA DAVIS
ROSELLE ILLSLEY
NATHANIEL JACKSON
GREGORY PETERSON
HELEN YELVERTON

PHYSICAL THERAPIST ASSISTANT

NANCY W. WATERMAN, PT,
Chairperson, Assoc. Prof.
B.S., Ohio State University
M.A., SUNY at Binghamton
DENISE ABRAMS, PT, Instr.
B.S., Russell Sage College
DEBRA MASTROPIETRO, P.T.A.
A.A.S., Orange County Community College

PHYSICS

See Engineering Science and Physics

RADIOLOGIC TECHNOLOGY

NANCY BUTTON, Chairperson
R.T. Nesbitt Memorial Hospital School of Radiologic Technology
B.A., Wilkes College
M.S., Marywood College
JANE DeMARIA, Asst. Prof.
A.A.S., Broome Community College
B.S., Medical College of Georgia
M.A., SUNY at Binghamton
BARBARA VALENTINO, Asst. Prof.
A.A.S., Broome Community College
B.P.S., SUNY Empire State College
M.A., SUNY at Binghamton
LINDA DEAN, B.S., R.T. (R)
PAMELA HOFFMAN, R.T. (R)
DOUGLAS ROBERTSON, R.T. (R)
RAYANNE TISDALE, R.T. (R)
MARDELLE VEST, R.T. (R)
DANIEL WENCK, R.T. (R)

SPECIAL CAREER PROGRAMS

FRANCIS J. SHORT, Chairperson
A.A., Broome Community College
B.A., SUNY at Geneseo
M.S., SUNY at Albany
RICHARD FITZPATRICK, Criminal Justice Coordinator
A.A.S., Broome Community College
B.S., M.S., Elmira College
BARBARA NILSEN, Early Childhood Coordinator
A.A.S., Broome Community College
B.S., SUNY Binghamton
M.A.S.S., SUNY Binghamton
Ed.O., Nova University

TOURISM AND HOSPITALITY MANAGEMENT

VICTORIA V. KING, Acting Chairperson, Instructor
A.A.S., B.S., Rochester Institute of Technology
DONNAMARIE D. BATTISTI, CFBE
JOAN BOBIER
JOHN BOLLES
JAMES MORRIS

ADMINISTRATIVE AFFAIRS

HELEN VERES
Vice President Administration
A.B., College Misericordia
M.S., SUNY at Cortland
Ph.D., Cornell University
JOHN T. McCAULEY
Assistant to the Vice President for Administration
B.S., Syracuse University
M.S., University of Colorado
RICHARD R. ARMSTRONG
Facilities Engineer
A.S., Broome Community College
B.S., Clarkson College of Technology
Professional Engineer

BUDGET OFFICE

REGINA L. KELLEY, Budget Officer
A.S., Broome Community College
B.S., SUNY at Binghamton

FINANCE OFFICE

ALAN L. KATZ, CPA, Controller
B.S., SUNY at Binghamton
M.B.A., University of Chicago Graduate School of Business
PEARL M. RANIERI, Assistant Controller
A.A.S., Broome Community College
B.S., SUNY at Binghamton
ETHEL F. BUCHANAN
Postal Operations
PATRICIA J. CLARK
Student Accounts Supervisor
A.A.S., Broome Community College
JOHN T. HASTIE
Purchasing Coordinator
B.S., University of Tennessee
THELMA WEST
Payroll Supervisor

HUMAN RESOURCES

ELIZABETH A. WOOD
Human Resources Officer
B.A., Wilkes College
M.A., Pennsylvania State University
JEFFREY A. JURIK
Human Resources Assistant
B.S., Northeastern University
M.B.A. University of Massachusetts (Amherst)

PHYSICAL PLANT

RALPH WALTER
Assistant to Vice President for Administration-Physical Plant

INSTITUTIONAL ADVANCEMENT

CHARLES J. QUAGLIATA
Chancellor's Award for Excellence in Professional Service
Vice President for Institutional Advancement
B.S., LeMoyne College
M.A., Syracuse University
JOHN J. SCATURRO
Assistant to the Vice President for Institutional Advancement
B.A., Queens College, CUNY
M.A., New York University

COMMUNITY EDUCATION

KATHLEEN HABEL, Director
B.S., SUNY at Oneonta
M.S., SUNY at Cortland
KAL HADDEN, Asst. Director
A.A., Keystone Junior College
B.S., SUNY at Plattsburgh
M.S., University of Scranton
KAREN MADSEN
Staff Associate, Community Programs
B.A., SUNY at Binghamton
M.S., SUNY at Binghamton

PUBLICATIONS CENTER

MICHELLE PERRICONE
Technical Assistant II
A.A., B.S., Empire State College

SPONSORED PROGRAMS

LYNDA E. SPICKARD
Director of Sponsored Programs
B.A., Colorado College
M.A., University of Colorado at Boulder

STUDENT AFFAIRS

JOHN J. PIEROG
Vice President for Student Affairs
B.S., M.Ed., Plymouth State College
Ed.D., Nova University
IRENE J. BYRNES
Assistant to the Vice President for Student Affairs
B.A., M.A., SUNY at Binghamton

ADMISSIONS

ANTHONY S. FIORELLI, Director
A.A.S., Broome Community College
B.S., SUNY at Albany
M.S., SUNY at Binghamton
MICHAEL CARRA
B.A., SUNY at Binghamton
JOHN KELLY
B.A., SUNY at Binghamton

ATHLETICS

DANIEL J. MINCH, Director
B.S., SUNY at Brockport
M.S., Elmira College

Emeritus

RICHARD E. BALDWIN

COUNSELING AND STUDENT DEVELOPMENT CENTER

GARY G. SMITH, Director
Chancellor's Award for Excellence in Professional Service
B.S., M.S., SUNY at Oneonta
Ed.D., Nova University
ALAN BENNETT, Full Counselor
A.S., Dean Junior College
B.S., M. Ed., Springfield College
LYNN BALUNAS, Full Counselor
B.S., University of Vermont
M.S., Syracuse University
M.S.W., Marywood College

JAMES GORMLEY, Asst. Counselor
A.A., Newton Junior College
B.A., Suffolk University
M.A., SUNY at Binghamton
MARY ELLEN HOGAN, Asst. Counselor
B.S., College of St. Rose
M.A., College of St. Rose
M.A., Columbia University
Ed.M., Columbia University
JANET KUHNS, Assoc. Counselor
B.A., Wilson College
M.A., Marywood College
MARY A. McCARTHY, Assoc. Counselor
A.A., Broome Community College
B.A., SUNY at Cortland
M.S., Ed.S., SUNY at Albany
SUSAN OHRABLO, Asst. Counselor
A.A., Westchester Community College
B.A., SUNY at Binghamton
M.S., SUNY at Oneonta
JOHN PAGURA, Asst. Counselor
B.A., M.A., SUNY at Binghamton
M.S.W., Marywood College

COUNSELOR FOR DISABLED
MARY ELLEN HOGAN, Asst. Counselor
B.S., College of St. Rose
M.A., Columbia University
Ed.M. Columbia University

EDUCATIONAL OPPORTUNITY PROGRAM
CLAUDIA CLARKE, Director
B.A., College of New Rochelle
M.A., SUNY at Binghamton

FINANCIAL AID
DOUGLAS S. LUKASIK, Director
B.A., Allegheny College
M.Ed., Temple University
LORRAINE V. BROWNE
A.A.S., Broome Community College
B.A., St. Thomas University
JOSEPH M. DROTAR, Asst. Director
A.A.S., Broome Community College
B.S., SUNY at Binghamton
SANDRA B. MORRIS
A.A.S., SUNY at Cobleskill
B.S., SUNY at Oneonta

HEALTH SERVICE
MARY LIGOURI, N.P., Director
A.A.S., Nursing, Broome Community College
B.S.N., M.A., SUNY at Binghamton
SHARON ZEMBECK
R.N., Charles S. Wilson Hospital

PUBLIC ASSISTANCE COMPREHENSIVE EMPLOYMENT (PACE)
BARBARA KANE LEWIS, Director
A.A.S., SUNY at Alfred
B.A., Empire State College
M.A., SUNY at Binghamton

PLACEMENT
ANNE M. SCOTT, Director
B.S., SUNY at Cortland
M.P.S., University of Colorado
LAWRENCE TRUILLO, Assistant Director
A.A., Broome Community College
B.A., SUNY at Oneonta
M.S., University of Scranton

STUDENT ACTIVITIES
DAVID R. MASLAR, Director
B.A., M.A.T., SUNY at Binghamton

Emeritus
R. BRUCE MACGREGOR

COLLEGE ENHANCEMENT

ALUMNI OFFICE
MICHELE E. KING, Director
A.A.S. Mohawk Valley C.C.
B.A., SUNY at Plattsburgh

FACULTY-STUDENT ASSOCIATION
GARY B. FINCH, Executive Director
A.A.S., Broome Community College
B.S., SUNY at Binghamton

BOOK STORE
DONNA M. FIRENZE, Director
A.A.S., Broome Community College
NANCY L. ROMANO, Assistant to Director, Textbooks

BCC FOUNDATION
MARY F. DEAN, Executive Director
B.S., The University of Tennessee-Knoxville
Certified Financial Planner (C.F.P.)
ROGER L. HARTMAN, Dir./Major Gifts
B.S., Bowling Green University
M.S., Elmira College

CHILD CARE CENTER
NANCY SELIGA, Director
A.A.S., Maria Regina College

INDEX

A

Academic Policies, 24
Academic Affairs Staff, 125
Academic Appeal Procedure, 28
Academic Preparation
 for Admission, 9
Academic Progress, 26
Academic Regulations, 27
Accident Insurance, 11
Accounting Program, 39
Accreditation, inside front cover
Administration Staff, 125
Administrative Affairs Staff, 131
Admissions, 8
 Chart for HS Preparation, 9
 For Part-Time Students, 22
Advanced Placement Exam, 16
Advisement, 22, 30
Affirmative Action Office,
 Inside Front Cover, 125
Alumni, 23
 Lifetime Membership Dues, 11
Anthropology Courses, 85
Application Fee, 10
Art Courses, 87
Associate Degrees, 24
Athletics, 33
Attendance Regulations, 26
Audio Visual Staff, 125
Auditing Courses, 27

B

Banking/Finance Program, 39
Banking Program Courses, 89
Biological Sciences Courses, 88
Board of Trustees, 125
Book Store, 23
Books, Supplies, Uniforms, 10
Broome County,
 Education Committee of
 Legislature, 125
Broome Community College
 Facts About, 4
Business Administration, 40
 Courses, 89
 Programs, 40
Business and Office Technologies
 Division, 15, 36
 Programs, 38-47

C

Calendar for 1991-1992, 136
Campus, The, 4
Career Planning, 30
Cecil C. Tyrrell Learning
 Resources Center, 21
Certificate Fee, 10
Certificate Programs, 15
Certificate of Residence, 10
Chemical Engineering
 Technology, 71
 Courses, 92
 Laboratory Fee, 10
Chemistry, 92
Choir, 33
Civil Engineering Technology, 72
 Courses, 94
Clubs, 32
College Enhancement, 23
College Enhancement Staff, 132
College Level Exam Program, 16
College-on-the-Weekend, 17
College Proficiency Exams, 16
Communication and Media Arts,
 62
 Courses, 95
Community, The, 4
Community Colleges in State
 University, 124
Community Education,
 Center for, 23
Computer Aided Design
 (CAD) Courses, 92
Computer Information Systems, 76
Computer Science, 74
Computer Studies, 73
 Courses, 96
Computer Technology, 76
Contents, Table of, 3
Cooperative Programs with
 other Colleges, 18
Corporate Service Programs, 23
Counseling and Student
 Development Center, 30
 Academic, 31
 Personnel, 31
Course Description Section, 85-122
Credit Equivalent Courses, 25
Credit by Evaluation, 16
 Fee, 10
Credit for Experiential Learning,
 16
Credit for Examination, 16
 Fee, 10
Credit for Prior Learning, 16
Criminal Justice, 64
 Courses, 96
Cross Registrations with other
 Colleges, 18
Curriculums of the College, 9, 24,
 85
Curriculum Organizations, 32

D

Dean's List, 28
Degrees Granted, 24
Degree Requirements, 24
Dental Hygiene, 49
 Courses, 98
 Expenses, 10
Deregistration for Non-
 Attendance, 27
Developmental Studies, 20
Diagnostic Testing, 20
Dietary Manager, 49
 Courses, 99
Disabled Students
 Support Services For, 20-21
Dismissal
 From the College, 26
Drama and Theater Group, 32

E

Early Childhood, 65
 Courses, 100
Early Admissions Program, 8
Economics Courses, 102
Educational Opportunity Pro-
 gram, (EOP), 8, 30
 Staff, 132
Electrical Engineering
 Technology, 78
 Courses, 102
Employment, 14, 34
Engineering Science, 80
 Courses, 104
English Courses, 104
English as a Second
 Language, 105
Entrance Requirements, 9
Entrepreneurship, 40
Estimating Expenses, 12
Executive Secretary Program, 46
Expenses, 10

F

Faculty, 126-131
Faculty-Student Association, 23
Federal Grants, 13, 14
Fees, 10, 11
 Refund Policy, 11
Financial Aid, 12
 Campus Based, 13
 Family Resources, 12
 How to Apply, 13
 Tuition Deferred, 12
 Notification of Decisions, 13
 Packaging Policy, 13
 Rights, Responsibilities for Recipients, 12
Fire Protection Technology, 66
 Courses, 105
Foreign Language
 Self-instructional Language Program), 16
Foundation (The Broome Community College Foundation, Inc.), 23
French Courses, 105
Full Opportunity Program, 15

G

General Education Requirements, 25
General Studies, 15, 56
Geography Courses, 106
German Courses, 106
Goals of the College, 5
Grade Point Average, 27
Grading Information, 27
Graduation, 28
 Declaration of Candidacy, 28
 For Evening & Part-time Students, 22
 Fee, 11
 Requirements, 24, 25
Grants, 14

H

Health Fee, 11
Health Sciences Division, 15, 48
Health Requirements for Health Programs, 48
Health and Wellness Resources Center, 30
Health Service, 30
HEGIS Course Numbers, 85
High School Equivalency, 8
History Courses, 106
History of the College, 4
Honors,
 Graduation with, 28
 Honors Program, 16
 Societies, 33
Hotel/Restaurant
 Management, 44
 Courses, 121
Housing, 30
How to Use This Catalog, 2
Human Development
 Courses, 31, 119

I

Immunization Regulations, 8
Independent Study, 25
Individual Studies, 67
Industrial Technology, 82
 Chemical Emphasis, 82
 Civil Emphasis, 82
 Electrical Emphasis, 82
 Manufacturing Technology Emphasis, 85
 Mechanical Emphasis, 83
 Production Management Emphasis, 83
 Quality Assurance Emphasis, 84
Information Center
 For Evening and Part-Time Students, 22
Institutional Advancement, Staff, 131
Insurance for Students, 11
Interior Design, 67
 Courses, 107
International Students, 32
 Insurance, 11
International Studies Program, 17
Intramural Sports, 33
Italian Courses, 107

J

Jazz Ensemble, 33
Jobs, Placement, 34, 35
Joint Degree Programs with SUNY Binghamton and other Colleges, 18

L

Late Registration Fee, 10
Late Registration Fee Policy, 28
Learning Assistance Center, 20
Learning Skills Courses, 108
Learning Resources Center, 21
Leave of Absence, 26
Length of Curriculums, 28
Liberal Arts, 15, 56
Liberal and General Studies
 Division, 15, 56
 Academic Advisement, 56
 Career Preparation, 58
 Courses, see under each heading
 Model Career Programs, 59
 Transfer, 61
Library, 21
Literature Courses, 107
Living Accommodations, 30
Loans, 14

M

Map of Campus, inside back cover
Management
 Programs, 40-43
Marketing
 Programs, 40-43
Mathematics Courses, 108
 Lab, 20
Measles Immunization Regulations, 8
Mechanical Engineering Technology, 81
 Courses, 110
Media, 33
Medical Assistant, 50
 Courses, 110
Medical Insurance, 11
Medical Laboratory Technology, 51
 Courses, 112
Medical Record Technology, 52
 Courses, 112
Mental Health Programs, 69
Mini Courses, 23
Mission & Goals Statements, 5
Music, Courses, 113
 Student Groups, 33

N

Non-Credit Programs, 23
Non-Discrimination Commitment
 Inside front cover
Non-High School Diploma Applicants, 8
Nursing, 53
Courses, 86

O

Office Technologies Certificate, 47
 Office Technologies Program, Dept., 46
 One-Plus-One Programs, 18
Orientation Program, 31
Open Enrollment, 8

P

PACE Program, 8, 30
Paralegal, 68
 Courses, 116
Part-Time Studies, 22
 Advisement, 22
 Tuition and Fees, 10, 11
Performing Arts, 32
Philosophy Courses, 115
Physical Education Courses, 114
Physical Science Courses, 115
Physical Therapist Assistant, 54
 Courses, 117
Physics Courses, 116
Placement, 34
 Testing, 20
Political Science Courses, 117
Portfolio Assessment, 16
 Fee, 10
President, 125
President's Letter, 6
President's List, 28
Probation, 26
Production Management, 83
Professional Society Affiliates, 33
Program-Identifying Numbers, 85
Programs with Other Colleges, 18
Psychology Courses, 117

Q

Quality Assurance, 84
 Courses, 121

R

Radiologic Technology, 55
 Courses, 118
Reading Courses, 119
 Lab, 20
Readmission, 26
Refund Procedure on Tuition, 11
 On Fees, 11
Registration Policy, 28
Religious Reasons for Absence, 29
Repeating Courses, 27
Resident Requirements, 10
Residency Certificate, 10
Retail Management, 42
Retention, 29
Returned Check Fee, 10
Room and Board, 12
Russian, 119

S

Satisfactory Academic Progress, 26
Science Option of Liberal Arts Curriculum, 57
Scholarships, 13, 14
Self-instructional Language Program, 16
Senior Citizens, Program for, 31
Sign Language Courses, 107
Social Science Courses, 119
Sociology Courses, 120
Spanish Courses, 120
Special Admission Programs, 8
Special Career Programs, 59
Special Transfer Programs, 61
Speech Courses, 120
Sponsor of the College, Broome County, 125
Sports, 33
State Grants, 13, 14
State University of New York, 123
Student Activities, 32
 Fees, 11
Student Services, 30
 Staff, 131
Student Center, 32
Student Development Center, 30
Students From Other Nations, 32
Student Government, 32
Student Organizations, 32
Student Publications, 33
Student Support Services Program, 20, 21
Study Abroad Programs, 17
Study Skills, 20
Summer Session, 11, 17

T

Table of Contents, 3
TDD/TTY Telephones, 1, 20, 21, 31
Technologies Engineering and Computing Divison, 15, 70
Testing, 20, 22
Theater/BCC, 32
Theatre Courses, 122
 Student Group, 32
Three-Plus-One Programs, 18
Transcript Fee, 10
Transfer, 8
 Credits, 8
 Programs, 18, 58
 To Broome Community College, 8
 To Senior Institutions, 18, 19
Travel and Tourism, 45
 Courses, 121
Trustees of the College, 125
Tuition, 10
 Assistance Programs, 12, 13, 14
 Deposit Policy, 11
 Refund Policy, 11
Tutoring, 20
Tourism and Hospitality Management, 44
 Courses, 121
Tyrrell, Cecil C. Learning Resources Center, 21

V

Varsity Sports, 33
Veterans, 31

W

Weekend Courses, 17
Withdrawal from the College, 28
Withholding of Grades, 28
Writing Center, 20
Writing Emphasis Courses, 25
Word/Information Processing, 47
Work Opportunities, 14
Work Study, 14

X

X-Ray Technology, 55
 Courses, 118

APPROVED CALENDAR
1992 - 1993 ACADEMIC YEAR

Fall

Classes Start	August 24
Labor Day (College Closed)	September 7
Mid-Semester Break	October 12-13
Thanksgiving Break	November 25-27
Last Day of Classes	December 14
Reading Day	December 15
Final Exams	December 16-18

Spring

Martin Luther King Day (College Closed)	January 18
Classes Start	January 19
Mid-Semester Break	March 3-5
Convocation Day	March 30
Spring Break	April 12-16
Last Day of Classes	May 14
Final Exams	May 17-20
Graduation	May 21

Approved by College Council December 17, 1990



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 1147 BINGHAMTON, NY

POSTAGE WILL BE PAID BY ADDRESSEE

BROOME COMMUNITY COLLEGE
ADMISSIONS OFFICE
P.O. BOX 1017
BINGHAMTON, NY 13902-7983

BCC
Broome Community College
State University of New York

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 1147 BINGHAMTON, NY

POSTAGE WILL BE PAID BY ADDRESSEE

BROOME COMMUNITY COLLEGE
ADMISSIONS OFFICE
P.O. BOX 1017
BINGHAMTON, NY 13902-7983

Date _____

S.S.# _____

Name _____

Address _____

City _____ State _____

Zip _____ Phone: () _____

H.S. Attended _____

Graduation (Mo./Yr.) _____

Any College Attended? If so, how many credits and at which colleges?

Check the information you would like to receive:

- ☐ Application
- ☐ Early Admissions for High School Juniors
- ☐ Education Opportunity Program (EOP)
- ☐ Financial Aid/Scholarship Info.
- ☐ Summer School Info.
- ☐ College Visit/Campus Tour

Please identify your curriculum interests:

Business
- ☐ Accounting
- ☐ Accounting/Banking Emphasis
- ☐ Business Administration (Transfer)
- ☐ Entrepreneurship
- ☐ Hotel/Restaurant Management
- ☐ Management
- ☐ Marketing
- ☐ Retail Management
- ☐ Travel & Tourism

Computer Studies
- ☐ Computer Science
- ☐ Computer Technology
- ☐ Computer Information Systems

Engineering (Transfer)
- ☐ Engineering Science

Health Sciences
- ☐ Dental Hygiene
- ☐ Medical Assistant
- ☐ Medical Lab Technology
- ☐ Medical Record Technology
- ☐ Nursing
- ☐ Physical Therapist Assistant
- ☐ Radiologic Technology (X-Ray)

Liberal Arts (Transfer)
- ☐ Liberal Arts (A.A.) Majors: Humanities, Social Sciences, Mathematics; Professions: Law, Teaching, Public Service
- ☐ Liberal Arts (A.S.) Majors: Biology, Chemistry, Physics; Professions: Medicine, Dentistry, Pharmacy, Physical Therapy
- ☐ Liberal Arts/Early Childhood
- ☐ Liberal Arts/Criminal Justice
- ☐ Liberal Arts/Pre-Forestry
- ☐ Liberal Arts/Mental Health
- ☐ Liberal Arts/Communication and Media Arts

Technologies
- ☐ Chemical Engineering Technology
- ☐ Civil Engineering Technology
- ☐ Electrical Engineering Technology
- ☐ Industrial Technology
- ☐ Mechanical Engineering Technology

Office Technologies
- ☐ Executive Secretarial
- ☐ Word/Information Processing
- ☐ Office Technologies Certificate

Special Career Programs
- ☐ Early Childhood Program
- ☐ Criminal Justice
- ☐ Dietary Manager (Certificate)
- ☐ Fire Protection Technology
- ☐ Individual Studies (A.S.) (Transfer)
- ☐ Individual Studies (A.A.S.) (Job Oriented)
- ☐ Interior Design (Certificate)
- ☐ Paralegal

BCC
Broome Community College
State University of New York

Date information sent: _____

Date _____

S.S.# _____

Name _____

Address _____

City _____ State _____

Zip _____ Phone: () _____

H.S. Attended _____

Graduation (Mo./Yr.) _____

Any College Attended? If so, how many credits and at which colleges?

Check the information you would like to receive:

- ☐ Application
- ☐ Early Admissions for High School Juniors
- ☐ Education Opportunity Program (EOP)
- ☐ Financial Aid/Scholarship Info.
- ☐ Summer School Info.
- ☐ College Visit/Campus Tour

Please identify your curriculum interests:

Business
- ☐ Accounting
- ☐ Accounting/Banking Emphasis
- ☐ Business Administration (Transfer)
- ☐ Entrepreneurship
- ☐ Hotel/Restaurant Management
- ☐ Management
- ☐ Marketing
- ☐ Retail Management
- ☐ Travel & Tourism

Computer Studies
- ☐ Computer Science
- ☐ Computer Technology
- ☐ Computer Information Systems

Engineering (Transfer)
- ☐ Engineering Science

Health Sciences
- ☐ Dental Hygiene
- ☐ Medical Assistant
- ☐ Medical Lab Technology
- ☐ Medical Record Technology
- ☐ Nursing
- ☐ Physical Therapist Assistant
- ☐ Radiologic Technology (X-Ray)

Liberal Arts (Transfer)
- ☐ Liberal Arts (A.A.) Majors: Humanities, Social Sciences, Mathematics; Professions: Law, Teaching, Public Service
- ☐ Liberal Arts (A.S.) Majors: Biology, Chemistry, Physics; Professions: Medicine, Dentistry, Pharmacy, Physical Therapy
- ☐ Liberal Arts/Early Childhood
- ☐ Liberal Arts/Criminal Justice
- ☐ Liberal Arts/Pre-Forestry
- ☐ Liberal Arts/Mental Health
- ☐ Liberal Arts/Communication and Media Arts

Technologies
- ☐ Chemical Engineering Technology
- ☐ Civil Engineering Technology
- ☐ Electrical Engineering Technology
- ☐ Industrial Technology
- ☐ Mechanical Engineering Technology

Office Technologies
- ☐ Executive Secretarial
- ☐ Word/Information Processing
- ☐ Office Technologies Certificate

Special Career Programs
- ☐ Early Childhood Program
- ☐ Criminal Justice
- ☐ Dietary Manager (Certificate)
- ☐ Fire Protection Technology
- ☐ Individual Studies (A.S.) (Transfer)
- ☐ Individual Studies (A.A.S.) (Job Oriented)
- ☐ Interior Design (Certificate)
- ☐ Paralegal

BCC
Broome Community College
State University of New York

Date information sent: _____

MAP OF THE CAMPUS

A- "ALMS HOUSE" BUILDING
Art Studio
Music Studio

AT- APPLIED TECHNOLOGY BUILDING
Computer Graphics (CAD)
Computer Studies
Electrical Engineering Technology
Engineering Science and Physics
Technology, Engineering and Computing Division

AX- AUXILIARY BUILDING
Hotel/Restaurant Management
Police Academy

B- BUSINESS BUILDING
Accounting
Business Administration
Computer Center
Marketing/Management Sales
Medical Assistant
Medical Record Technology
Office Technologies
Radiologic Technology

F- 901 FRONT STREET
Biological Sciences
Nursing

LRC- CECIL C. TYRRELL LEARNING RESOURCES CENTER
Audio-Visual
Information Center for Evening & Part-Time Students
Learning Assistance Center
Library
Mathematics
Publications Center
Reading and Study Skills
Science Learning Center
Writing Center

M- MECHANICAL BUILDING
Civil Engineering Technology
Mechanical Engineering Technology
Medical Laboratory Technology
Special Career Programs

MAINT. - MAINTENANCE BUILDING

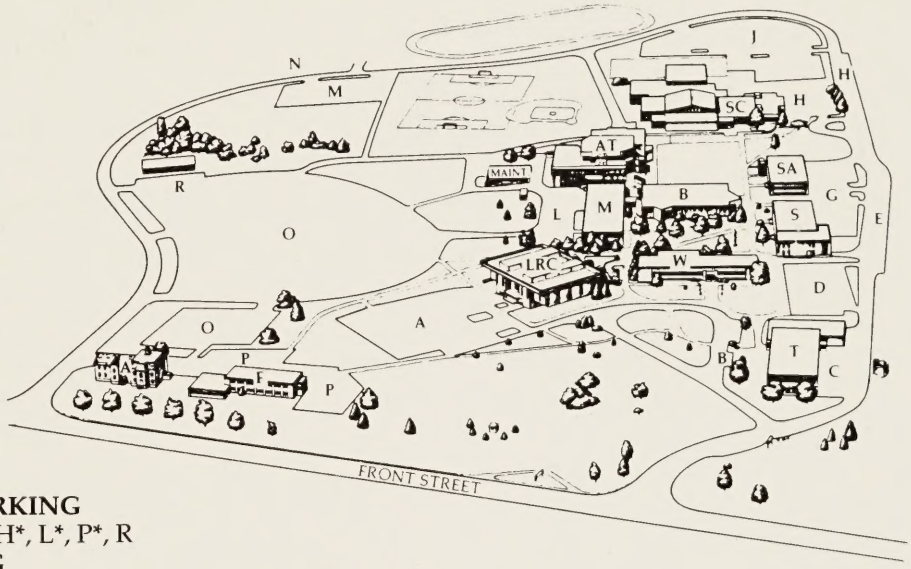
S- SCIENCE BUILDING
Chemical Engineering Technology
Dental Hygiene

SA- STUDENT AFFAIRS BUILDING
Copy Center
PACE Program
Physical Therapist Assistant Labs
Student Activities
Student Lounge

SC- STUDENT CENTER
Book Store
Cafeteria
Educational Opportunity Program
Gymnasium
Human Resources Office
Little Theater
Physical Education

T- TITCHENER HALL
Communication/Media Arts
Faculty Student Association
Health Sciences
Liberal and General Studies
Mathematics

W- WALES BUILDING
Admissions Office
Administrative Offices
Alumni Office
BCC Foundation
Center for Community Education
Counseling and Student Development Center
Educational Technology
Finance Office
Financial Aid
Health Service
Institutional Advancement
Institutional Research Program
Office for Sponsored Programs
Placement Office
Registrar's Office
Student Affairs Office



STUDENT PARKING
Lots: J, M, N, O*
FACULTY/STAFF PARKING
Lots: A*, C, D*, F*, G*, H*, L*, P*, R
VISITORS' PARKING
Lots: B*,E

**Handicapped Parking Available*

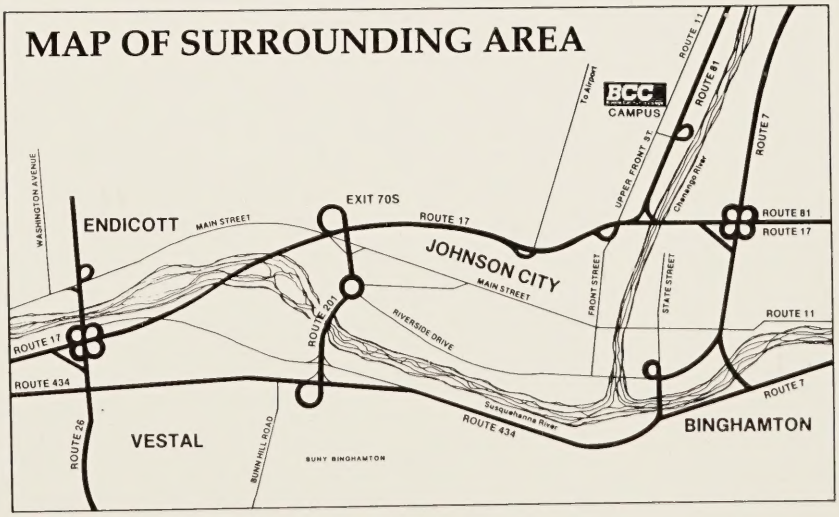
PARKING

All vehicles must be registered with the Campus Security Office. Students are allowed to park only in student lots until 5 PM after which an open parking policy exists. A parking map is available in the Campus Security Office. However, certain general rules are always in effect:

- No parking on grass, roadways, or lot perimeters
- No parking in handicapped zones without a permit (issued by Campus Security)
- Lot D is reserved for staff at all times

Violations of the regulations will be ticketed and fined.

MAP OF SURROUNDING AREA



BCC
Broome Community College
State University of New York

PO Box 1017
Binghamton, NY 13902

PLEASE NOTE:

THIS IS THE ONLY COPY OF THE GENERAL CATALOG THAT WILL BE PROVIDED TO YOU. PLEASE RETAIN AND USE DURING YOUR TIME AT BCC.